

Dynamics of Power & Managerial Control in the Contemporary Service Sector

Safeguarding Organizational Value Creation Within & Beyond Conventional Workplaces

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Chapter 1

Introduction and Outline

Studying Dynamics of Power & Managerial Control in Contemporary Service Sector Business Models from a Socio- Political Perspective

Setting the Stage: Power, Profits, and Precarity in the 21st Centuries' Service Sector

The contemporary service sector is undergoing a *significant transformation* (e.g. Maglio et al., 2018; Roberts, 2018; Roland & Huang, 2014). From a managerial perspective, the advent of digital technologies, together with the social, political, and regulatory transformations of the global economy, has bolstered the emergence of new ventures and business models (e.g., Peitz & Waldfogel, 2012; Teece, 2010; Turner & Holten, 2015; Wirtz et al., 2016). As a consequence, competitive pressure has accelerated in many service-sector branches, particularly in the field of low- to medium-qualified services (Burr & Stephan, 2019; Kalleberg, 2009; Maglio et al., 2018; Osterwalder et al., 2011).

Bolstered by these transformations, *corporate business models* (defined as managerial logics ‘connect[ing] technical potential with the realisation of economic value’ (Chesbrough & Rosenbloom, 2002:38) and the setup of corresponding *organisational structures*) within and beyond the service sector, have become increasingly diversified (e.g., Osterwalder et al., 2011; Wirtz et al., 2016). The same is true for *workforce management approaches*, meaning organisational practices routines established to safeguard efficient processes based on specific *control- and monitoring-mechanisms as well as performance- and human resource-management routines* (e.g., Armstrong, 2011; Roland & Huang, 2014). This development is driven by the increased sensitivity of both business scholars and practitioners to the strategic importance of different business models and workforce management approaches that are increasingly considered as core factors influencing corporate success (e.g., Armstrong, 2011). However, industrial relations and labour relations scholars have emphasised that these transformations have been accompanied by *sometimes problematic outcomes* for work and employment within and beyond conventional service sector corporations (e.g., Artus, 2008; Blyton et al., 2008; Böhle et al., 2010; Bosch & Weinkopf, 2011; Kalleberg, 2009). Bolstered by technological, regulatory, and economic dynamics, low- to medium-qualified service-sector employment has become increasingly non-standardised and commodified in many Western societies, including both liberal and coordinated market economies (e.g., Alberti et al., 2018; Dörre, 2016, 2018 2019; Hyman, 2018; Kalleberg, 2009, 2011). Contemporary service sector is hence characterised by an increasing share of so-called precarious labour relations (e.g.; European Commission, 2018; IndustriALL Global Union, n.d.; WoRC, n.d.). This involves unprotected, insecure work and employment relations where workers lack access to basic employment rights and face uncertainty concerning the duration of

employment. In addition, workers lack access to social protection and benefits, and face substantial legal and practical obstacles to organising and participating in the decisions that affect their working lives (e.g., Böhle et al., 2010; Hyman, 2018, 2019; Kalleberg, 2009, 2011).

Scholars from various fields have *associated these labour-related issues with the transformation of existing service-sector business models* (e.g., Castel & Dörre, 2009; Hyman, 2018, 2019; Rehder, 2016; Wortmann, 2004; Rosenblat & Stark, 2015). Transforming corporate policies geared towards safeguarding corporate efficiency and competitiveness in light of increased market pressure entail various agendas driven by corporate attempts to optimise labour costs in relation to labour output. Due to the crucial role of labour expenses in the low- to medium-qualified service sector industries (e.g., Artus, 2008; Broadbridge, 2002; Brozkurt, 2015). Service sector managers are hence increasingly concerned with the question of ‘How to Squeeze More Out of a Penny’ (Rosen, 2006:243) when it comes to the setup of corporate workforce management and employment relations.

Consequently, many managerial efforts aimed at increasing the profitability and efficiency of service sector operations are closely linked to practices geared towards minimising labour cost. Regarding their social and labour-related consequences, critical scholars argue that these efforts of minimising labour costs leads to the increase of commodification and precarity in *work and employment conditions* (e.g., Artus, 2008; Brozkurt, 2015; Rosen, 2006; Vidal, 2012). Put together, research indicates that specific managerial business models, which are aligned with distinct organisational structures, workforce management approaches, and control- and monitoring-mechanisms can be seen as important aspect bolstering the emergence labour-related issues in certain segments of the contemporary labour market.

Against this background, the cumulative dissertation at hand aims to provide a clear-cut understanding of this relationship between business models, managerial control and influence mechanisms, corresponding organisational workforce management systems, and the resulting work and employment conditions based on the investigation of such ‘problematic’ cases. Specifically, the three chapters assembled investigate so-called *hard discounters* such as the German food retailer Lidl, and *platform-based service providers*, such as the American ridesharing company Uber. Thereby, the chapters focus on specific contemporary business models in the field of low- to medium-qualified services which have been criticised for establishing problematic work and employment conditions to safeguard corporate efficiency.

Theoretical Outline

To address its overarching research goal, the thesis departs from critical approaches in the sociology of work and organisation and *socio-political concepts of power* in management and organisational theory (see e.g. Becker-Ritterspach et al., 2016; Fleming & Spicer, 2014 for an overview). ‘Socio-political approaches’ (e.g. Dörrenbächer & Geppert, 2014) investigate power as a generic phenomenon inherent to all coordinated and organised activities (Clegg, 1989; Clegg et al., 2006). Going beyond narrow, common-place understandings of power as (potentially illegitimate) exercise of punitive force and early scholarly perspectives where ‘power and conflict were either only implicitly addressed (e.g., Bartlett and Ghoshal 1989) or they were treated as aberrations that were at worst dysfunctional and at best controllable through appropriate organisational design’ (Becker-Ritterspach et al., 2016:4), socio-political theory considers power as an inevitable, necessary and ‘endemic part of organizational life’ (Fleming & Spicer, 2014:237).

This genuine understanding of power points towards the key rationale for taking this theoretical stance for the analyses at hand. Socio-political scholars emphasise the ‘Janus-faced’, two-sided nature of power both as ‘punitive’ and ‘facilitative’ phenomena probably best depicted by Clegg (1989, Clegg et al. 2006). Synthesising ideas from Michel Foucault (1977, 1980) and Talcott Parsons (1951), he points out that the existence of power within and beyond organised settings has both ‘punitive’ and disciplining effects: On the one hand, the exercise of power limits individual agency, can include sanctions and thus can harm individuals. However, Clegg also emphasises the facilitative character of power as the core force keeping social systems coherent by enabling the exercise of (legitimate) control and integrate and coordinate collaborative activities in an efficient, goal-attaining manner. Thereby, the socio-political notion of power can fruitfully be applied to conceptually link managerial policies and practices of control with both their ‘facilitative’ impetus and effects (in terms of corporate profitability) as well as with their restrictive and sometimes ‘punitive’ outcomes (e.g. concerning the conditions of work and employment) for those being exposed to them.

Similarly, socio-political scholarship highlights that power is relational property embedded in specific contexts. This means that certain actors not inherently ‘possess power’ but the power ‘held’ by certain actors is based on the relative distribution of their capacity to influence other actors in organisational settings based on (legitimate or non-legitimate, formal, or

informal) resources (Clegg, 1989). These capacities and resources are rooted in the socio-normative and socio-technical structures of these organisations and their environments. This point towards an important analytical distinction regarding this relationship of actors' capacities and socio-normative and socio-technical structures: Concerning the levels of analysis, socio-political scholarship highlights that observable, identifiable acts of micropolitical behaviour (such as e.g. actors' attempts to exercise formal authority, engage in impression management or strategically provide selective information) related to the direct exercise of power ('*episodic power*'), needs to be analysed in relation to the organisational and societal contexts it takes place in. Thus, socio-political power theory highlights a 'second layer' of analysis referred to as '*systemic power*', addressing the organisational structures and wider institutional contexts power is congealed in (e.g., Allen & Panian, 1982, Burns, 1961, Fleming & Spicer, 2007).

For the purpose of the analysis at hand, this analytic distinction allows to systematically relate managerial control practices (which can be conceptualised as exercise of power at the systemic level) and problematic working conditions (which can be conceptualised as individual outcomes of episodic processes for low-power actors in certain organisational settings) with specific organisational structures and workforce management approaches (which can be understood as elements of the setup of systemic power).

Besides this 'socio-spatial dimension' (Becker-Ritterspach & Blazejewski, 2016) of systemic and episodic power, theorists in the field have emphasised the '*temporal dimension*' of power (e.g. *ibid.*) to conceptually capture the fact that power relations in organisational settings can be dynamic. In general, socio-normative and socio-technical structures (such as specific organisational structures, organisational culture, technologies applied for process management and workforce control, formal and informal rules, broader societal norms and discourses) create institutionalised, relatively stable, systemic arrangements and standing conditions shaping ongoing episodes of power in given instances (Clegg 1989; Oliveira & Clegg 2015). Nevertheless, stakeholders in organisational settings can attempt to transform these power configurations by micro-political activity and resistance.

However, powerful key actors in organisational settings (such as e.g. top-level management teams) can attempt to suppress or counter these efforts by political strategising and *setting up systemic structures in a way safeguarding their interests and limiting the room for agency of other stakeholders*. Consequently, while some organisational arrangements provide

conditions that are more supportive for dynamic permutations of power relations, other types of organisations are cauterised by rather persistent power configurations which are often based on significant power asymmetries between powerful key actors and low-power actors/stakeholders. Therefore, the holistic analysis of power in organisational settings allows to link the ongoing micro-political dynamics of episodic power to the study of systemic power configurations to explain permutation and/or persistence of power relations and power asymmetries in given organisational settings.

For the overarching research purpose of this dissertation, this *conceptualisation of organisational change and/or 'inertia'* is valuable as it allows to capture the efficiency of specific service sector business models even in cases where apparent, ongoing success of certain companies is accompanied by public criticism and problematic outcomes for workers and other stakeholders. In organisational configurations where stakeholders and workers possess limited individual or collective agency (e.g. based on a weak labour market position or the absence of protective regulation and legal rights for codetermination) and where, simultaneously, significant power asymmetries and mechanisms suppressing resistant micropolitical activity at the episodic level are institutionalised in the systemic setup of power relations, the emergence and persistence of both power imbalances and 'oppressive' labour regimes is highly likely.

Introducing the Assembled Papers

Against this theoretical background, the *common empirical focus* of the assembled contributions is on companies in the field of low- to medium-qualified services. The thesis addresses both companies that operate within the traditional boundaries of formalised, bureaucratic-hierarchical corporate organisation as well as novel business models for service sector value which are receiving increasing public and academic attention under the label of the ‘sharing economy.’ Specifically, the three chapters investigate so-called *hard discounters* such as the German food retailer Lidl (chapter 2), and *platform-based service providers*, such as the American ridesharing company Uber (chapters 3 and 4).

These organisations share particular characteristics regarding the *organisation of employment and the control of work processes*: In different ways, the business models, management practices, and employment systems of these companies differ remarkably from the ideal type of industrial organisation characterised by Fordist process management; bureaucratic control; Taylorist management; and relatively stable contract-based regular employment relations within the nexus of the ‘Coasion’ firm (e.g., Davis, 2016a, b; Kalleberg, 2011). This model of corporate value creation as the ‘normal state’ of business organisation not only has shaped the economic reality but also determined economic and social science theory formation over long stretches of the 20th century (e.g., Davis, 2015, 2016a, b). Hence, the selection of the investigated corporate contexts accounts for the empirical heterogeneity of contemporary service sector business models and thereby aims to provide valuable insights on the dynamics in the contemporary, post-industrial business arrangements.

Moreover, as outlined above, research has pointed to the existence of power asymmetries in these settings as well as both hard discount retailing- and platform-based on-demand business models have been criticised in public and scholarly debates due to labour-related issues that are associated with their business policies. Therefore, the selected empirical settings also provide opportunities for analyses of power and politics from a socio-political perspective. Building upon the outline of the empirical context and theoretical foundation of the dissertation I subsequently provide a brief overview of the three chapters assembled in this dissertation.

Chapter 2

The **first paper** ('Total institutions revisited: What can Goffman's approach tell us about "oppressive" control and "problematic" conditions of work and employment in contemporary business organizations?', published in *Competition & Change* 2017, Vol. 21 [4] 253–273, SAGE) offers an analysis of hard-discount food retailers, characterized by applying a rigid cost-leadership strategy based on the optimization of logistics, utilising bargaining power with suppliers (Vidal, 2012), and implementing strict measures of cost minimisation.

To analyse power configurations and potentially oppressive forms of work and employment in this type of contemporary service sector organisation, the paper uses a framework based on Erving Goffman's reflections on '*total institutions*' (Goffman, 1961). While many other key ideas of Goffman have fruitfully contributed to critical scholarship regarding management, organisation, and industrial relations (e.g. Clegg, 2009; Farrington, 1992; Tracy, 2000), efforts to apply Goffman's concept of total institutions to the analysis of business organisations are rare. This scarcity is problematic, as Goffman's description of specific 'extreme cases' (Geppert, 2015) of organisational arrangements, such as work camps, suggests similarities to media reports of oppressive work and employment practices in certain problematic cases involving contemporary service sector companies. In line with Stewart Clegg (2006:4), the paper argues that 'Goffman's depiction of total institutions demonstrates in heightened and condensed form the underlying organisational processes that can be found, albeit in much less extreme cases, in more normal organisations' and thus provides a suitable theoretical foundation to study hard discounters from a critical angle. This argument is also aligned with propositions made in methodological literature (e.g. Strauss & Corbin, 1997) emphasising the importance of comparing cases that appear dissimilar at first glance to gain a sharper understanding of common dimensions and thus to develop new perspectives on phenomena.

Following this logic, the paper analyses the so-called *Lidl scandal of 2008* (Conelly, 2008) in comparison to several elements of the total institution that Goffman has labelled 'staff-inmate divides', practices of 'efficiently handling people' by strict 'systems of surveillance and constant supervision', distinct systems of 'internal privileges and sanction', and the 'tight scheduling of daily routines'. The analysis is based on interview data collected from Lidl shop floor employees, middle managers, and union officials in five European countries in previous research by Geppert et al. (2015) as well as company documents and additional

media coverage of the case gathered for the further investigation of the case conducted in the paper.

The analysis shows how organisational characteristics and managerial practices such as a strict neo-Taylorist work organisation and constant surveillance bolster various labour issues for some hard-discount retailers. It also illustrates that widespread practices of intensified surveillance and a strong emphasis on disciplinary measures in the sector are bolstered by specific institutional and socio-economic conditions. By applying an analytic heuristic derived from Goffman's concept, the analysis also highlights that suppressive forms of control in business organisations do not just display deviance, aberration, or managerial misconduct: While functionalist research on organisational control would interpret these phenomena as 'dysfunctionalities' (e.g. Child, 1984), which need to be carefully managed in efficient organisations, from a total institutions perspective they constitute elements bolstering organisational efficiency that are rooted in wider organisational and structural conditions.

The paper contributes to research on hard-discount food retailers, which – although often triggering public criticism – have hardly been studied systematically. Moreover, the framework also explains contemporary employment practices which have been labelled 'abusive' and 'precarious' (e.g. Artus, 2008; Brozkurt, 2015; Conelly, 2008; Rosen, 2006; Wortmann, 2004) in public and academic debates; these practices are even present in institutional settings usually known for robust employee protection arrangements. The paper illustrates that these practices cannot be explained in isolation from company-specific business models and the resulting formal and informal practices of work organisation, process coordination, and specific organisational power configurations.

The following two papers also address the connection between organisational structures, power configurations, and work and employment conditions. However, they shift the focus towards companies in the so-called 'platform or - sharing economy' (e.g. Belk, 2014). In particular, they focus on commercially oriented service-on-demand platforms. These platforms provide a wide range of services via web-based online architectures in, for example, the fields of passenger transport, building cleaning, translation, design and layout, and copywriting. As a common characteristic, work is allocated by platforms formally serving as mere intermediaries for workers formally classified as freelancers. These freelancers 'sell' their services to other users requesting tasks to be carried out either digitally

or physically (e.g. Sutherland & Jarrahi, 2018).

Similar to the hard-discount model studied in the first paper, corporate platform business models include elements and practices beyond the traditional mechanisms and organizational structures for coordinating and controlling business processes in traditional industrial settings. Research has pointed to power asymmetries in these settings, and platform companies have frequently been criticised for labour-related issues (e.g. De Stefano, 2015; Rosenblat & Stark, 2015). However, the underlying business models, coordination mechanisms, and employment systems – as well as the employment-related problems – significantly differ from those previously studied drawing on the case of Lidl. Thus, both studies of these novel organisational arrangements *capture the heterogeneity of power-related phenomena and resulting employment conditions* in the broad spectrum of business models and analyse them in conjunction with specific organisational features to develop a more clear-cut understanding of the broad variety of contemporary service sector business models.

Chapter 3

To provide a foundation for this analysis, the **second paper** (‘The Dynamics of Power and Resistance in Platform-based On-demand Labour Arrangements: A Literature Review through the Lens of Socio-political Theory’) investigates the current state of knowledge on the role of power relations between different stakeholders in commercially oriented service-on-demand platforms.

The increasing volume of academic works on sharing economy business models points towards the *role of power asymmetries* between the platform operators and platform workers in these settings, associating them with both managerial profit-seeking and digital business model characteristics (e.g. Bucher & Fieseler, 2017; Codagnone et al., 2016; Curchod et al., 2019; Gandini, 2018; Graham et al., 2017; Lee et al., 2015). Similarly, these power imbalances are associated with problematic labour conditions in certain cases (e.g. Alberti et al., 2018; Calo & Rosenblat, 2017; Manolchev, 2019; Peticca-Harris & Ravishankar, 2018; Rosenblat & Stark, 2015; Van Doorn, 2017; Wood et al., 2019 a, b). While existing research provides manifold descriptions and initial analyses of power-related phenomena, what are missing are holistic reviews of power-related phenomena grounded on theoretical concepts of power from organisation and management research.

Addressing this gap, the paper explores findings regarding the core themes in platform research and phenomena relevant to understanding power in on-demand work platforms based on a *systematic review*. The findings are organised along the seminal taxonomy of episodic and systemic ‘faces of power’, namely, coercion, manipulation, domination, and subjectification, and ‘sites of power’. This approach captures not only management practices and process organisation ‘by’ platforms, but also platform workers’ and external stakeholders’ mechanisms for exercising power ‘against’ platforms (Geppert & Dörrenbächer, 2014; Becker-Ritterspach et al., 2016; Fleming & Spicer, 2007, 2014).

The review indicates that the *exercise of power by platforms* is based on intertwined technology-based and discursive mechanisms, along with specific conditions in their institutional environment, which, together provide the foundation for the systemic power (in terms of domination and subjectivation) is inscribed in platform arrangements based on ‘algorithmic management’ (e.g. Lee et al., 2015; Rosenblat & Stark, 2015; Wood et al., 2019a). By implementing elements of algorithmic management such as bureaucratic mechanisms (e.g. setting rules of membership, prescribing process patterns), establishing information channels in a specific way, and implementing by technology-based surveillance mechanisms platform operators can continuously monitor users’ communications and actions and utilise access to information in order to safeguard frictionless operations and control platform workers’ activities. In addition, ‘gaps and cracks’ in surrounding industrial relations and employment legislation systems allow platforms to classify workers as freelance subcontractors, thereby both safeguarding their economic efficiency by avoiding overheads and cost associated with regular employment and excluding platform workers from protective regulations and formal rights for codetermination, collective voice and interest articulation.

This systemic setup enables platform providers to exercise episodic power based on various mechanisms. In contrast to the findings on hard discounters, coercive elements of episodic power such as direct managerial supervision and control power play a comparatively minor role in these settings. Instead, platforms replace direct managerial supervision with customer involvement via algorithmic evaluation mechanisms embedded in the platform infrastructure. In addition, platforms utilise various techniques to exercise episodic power via manipulation (e.g. interventions in match-making, the purposeful setup and continuous refinement of incentive structures, the provision of selective information, in-app nudges, and in-app rhetoric manoeuvres) to ensure that platform processes proceed within desired boundaries

and with desired economic outcomes.

Beyond this, platforms also harness systemic environmental conditions (e.g. norms and narratives of the sharing economy) to engage in discursive manoeuvres to hinder the emergence of calls for more favourable working conditions and to legitimise the business model in the eyes of customers, shareholders, the public, and political regulators.

On the other hand, research highlights both individual and collective activities via which workers and other stakeholders exercise *power against platforms* in light of these managerial policies (e.g. Curchod et al., 2019; Gupta et al., 2014; Irani & Silberman, 2013; Lehdonvirta, 2016). These ‘counter-activities’ include individual coping strategies, such as the manipulation of algorithmic process coordination and collaborative forms of episodic action which build on specific systemic structures, such as self-organised communication networks or digital complementary of-app structures (such as Turkopticon third party platform allowing workers to give feedback on their customers to help other users to avoid problematic jobs or recommend superior ones, or FairCrowd.work, where platform workers can evaluate apps they work) for overcoming alienation, bolstering solidarity, and establishing counter-publics to increase worker agency, decrease systemic information asymmetries, and provide platforms for coalition-building with external third-party stakeholders. What is more, both workers and external stakeholders engage in activities aimed at altering – or even replacing – the sometimes-oppressive systemic arrangements established by commercial on-demand service platforms. For example, they engage in legal strategising to force platforms to alter these structures to favour workers, or to provide or establish cooperative platform structures offering less restrictive alternatives for organising platform-mediated service provision (e.g. Schor, 2014; Davis, 2016a, b).

Put together, the systematic review based on the analysis of more than 300 seminal contributions from platform scholarship contributes to existing research by providing a comprehensive overview of power-related phenomena in the digital economy. Departing from the synopsis of literature structured along the taxonomy of ‘faces’ and ‘sites’ of power, it moreover discusses apparent gaps in existing research and unveils avenues for further on-demand platform scholarship through the conceptual lens of power theory. For instance, the paper discusses how research in the field could benefit from a stronger consideration of discursive approaches and sense-making perspectives on power in business and organisation studies (e.g. Vaara et al., 2005; Clark & Geppert, 2011). Similarly, the paper provides

suggestions regarding how studying platform arrangements paves the way for studies seeking to enhance power theory, for instance, by investigating innovative forms of mobilisation both by and against platforms when episodic processes of power, such as public campaigns or coordinated strike action, are organised based on novel technological structures.

The findings also indicate that developing conceptual frameworks grounded in existing power scholarship for studying processes and permutations of power configurations in platform is important: While studies have provided some descriptive analyses of change processes in platform settings, such frameworks could provide an analytical blueprint for comparing these cases and could shed light on the prerequisites, pathways, and patterns of change of power relations in specific settings. Such models could also guide comparative analyses of power in heterogeneous gig work settings, which are still scarce.

Chapter 4

The **third paper** ('A "Circuits of Power"-Based Perspective on Algorithmic Management and Labour in the Gig Economy', current version 'conditionally accepted' for publication in *Industrielle Beziehungen. Zeitschrift für Arbeit, Organisation und Management/ The German Journal of Industrial Relations*, Special issue: 'Arbeitswelten und Arbeitsbeziehungen in der Plattformökonomie', 2020, Vol. 27 [2], Budrich) picks up on this diagnosis and attempts to close this conceptual gap, departing from Stewart Clegg's framework of 'circuits of power' (Clegg, 1989; Clegg et al., 2006). The framework traces the 'explicit mechanism for [...] the exercise of power' (Lapsley & Giordano, 2010) from a longitudinal perspective as it conceptualises the dialectics of systemic power structures and the episodic exercise of power. On the one hand, it elaborates the mechanisms by which systemic structures embedded in relatively durable societal and organisational arrangements affect processes and interactions in a top-down manner by providing the 'standing conditions' (Clegg, 1989; Clegg et al., 2006) of episodic power. On the other hand, the concept provides a detailed conceptualisation of mechanisms via which "bottom-up" organisational interactions – whereby actors seek to maintain, gain, or deny a strategic advantage by controlling or contesting systemic structures (Oliveira & Clegg, 2015) – can lead to changes in organisational power configurations. Hence, the framework 'allows researchers to identify and understand both how power shifts across actor networks and how power generates such networks' (Oliveira & Clegg, 2016:426).

Based on Clegg's model, the paper develops an analytic template to analyse these dynamics in on-demand service platform settings. To illustrate the application of this template, the paper draws on the case of the U.S. ridesharing platform Uber, which has caused vivid debates (e.g. Allen-Robertson, 2017; Collier et al., 2018; Davis, 2015; Fleming, 2017; Wentrup et al., 2019). The case study is based on seminal contributions and media coverage. Following the proposed analytical template, the analysis proceeds in four stages.

First, it describes Uber's initial 'socio-political setup' in terms of actors, interests, the scope of agency, and the 'technologies of production and discipline' (Clegg, 1989) available to the company to steer its operations. Based on legal and technological foundations, platforms can build a systemic infrastructure that supports the establishment of distinct power-related control and influence mechanisms in the platform's algorithmic management approach.

In a second step, the paper considers the 'diversified portfolio' of control and influence mechanisms used by Uber to steer processes. This portfolio combines algorithmic bureaucracy, direct control by customers based on user evaluation systems, incentivising dynamic pricing mechanisms, and the use of in-app communication channels for subtly manipulating and nudging platform workers.

The third stage of the analysis illustrates how these mechanisms "top-down" constitute processes, interactions, and episodes of power in day-to-day processes of the platform organisation. In this step, the text describes both the facilitative effects of these practices – the ways these practices bolster platform efficiency – as well as their restrictive or even 'punitive' outcomes in terms of labour conditions and subjective issues faced by platform workers.

Finally, the circuits of power approach, combined with ideas from micro-political scholars, demonstrates how these control and influence mechanisms curtail gig workers' power, thus limiting bottom-up processes that could induce shifts in Uber's power configuration. Hence, the paper demonstrates how specific power-related processes in the problematic case of Uber tend to reify and stabilise initial power asymmetries between providers and workers at a structural level.

Conclusion and Contribution

By providing insights on the interrelations of control and influence mechanisms, organisational workforce management, and work and employment conditions in rather different empirical settings, the assembled papers provide valuable insights on dynamics of power and managerial policies in contemporary service sector business models operating beyond the well-known patterns of conventional industrial workplace organisation.

Besides the case- and field-specific findings and various specific contributions to socio-political scholarship highlighted above (and in the papers themselves), I want to conclude by highlighting the overall potential of socio-political perspectives to appropriately address important issues in current scholarly debates in various disciplines focusing on the interrelations of business models, control and influence mechanisms, workforce management systems, and work and employment conditions.

The assembled contributions illustrate, that the study of these interrelations crucially relies on holistic research perspectives which can be provided by the core theoretical concepts of socio-political scholarship. As emphasised, and illustrated by the analyses assembled in this dissertation, such holistic analyses of power in organisational settings require *and* allow to integrate episodic, systemic, and longitudinal perspectives. Next to the advantages of considering *theoretical* and *empirical* insights from the field, future studies of ‘questionable’ business models and organisational arrangements in different contexts could therefore benefit from this core insight from socio-political scholarship *methodologically*: In particular, research future research could benefit from combining the analytical templates developed in course of this dissertation with the holistic ‘stratified framework’ for the analysis of micropolitical processes recently proposed by Becker-Ritterspach & Blazejewski (2016).

The framework provides a holistic approach to methodically capture (1) ‘the episodic perspective [on power] disclos[ing] when and how an actor has a stake in the current political events’, (2) the wider systemic embeddedness or ‘spatial dimension’ of power ‘disclos[ing] how actors, interests and resources are constituted by local, organisational, regional, national or transnational contexts’ as well as (3) the temporal dimension of power allowing to understand ‘how political action [...] is linked to past events and future prospects’ (ibid.:204-205). Against this background I think that the theoretical insights and methodological innovations provided by the three contributions assembled in the dissertation could be valuable to enhance the methodological and conceptual foundations of socio-political

scholarship required to engage in holistic analyses of power in various organisational settings in the following ways:

For one, the Goffman-based analysis of hard discount food retailing presented in chapter 2 analysing episodic and systemic power in the corporate setting of Lidl illustrates how Becker-Ritterspach's and Blazejewski's concept, originally developed for the study of micropolitics in the realm of complex multinational corporations, can also be applied to systematically analyse power relations in local corporate contexts. Based on the in-depth case-study analysing the entanglement of systemic and episodic power in a concrete organisational setting, the paper illuminates the impact of the 'extra-organisational situation' of power related processes by analysing in detail how institutional, environmental standing conditions (such as the weak labour market position of employees and the specificity of the codetermination laws in the researched German context) contribute to the creation of 'totalitarian', authoritarian corporate structures. Thereby, the analysis exemplifies how the impact of the 'extra-organisational situation' emphasised by Becker-Ritterspach and Blazejewski can be captured in analyses of power in concrete organisational settings. Moreover, the analysis accounts for the 'personal situation' of low-power actors considered important by Becker-Ritterspach and Blazejewski not only regarding their micropolitical power but also with a focus on the subjective experiences of individuals in totalitarian-authoritarian company settings. The paper thereby demonstrates how a Goffman-based perspective can serve to analyse problematic employment practices with regard to their power-theoretical foundations *as well as* their problematic subjective implications simultaneously. In doing so, the theoretical contribution of the paper might ultimately help to establish theoretical connections between socio-political scholarship in organisation and management and analyses of problematic labour and employment in critical sociology.

For two, the analysis provides a blueprint for investigations of the 'socio-spatial dimension' of power in studies focusing on micro-political processes on the shop floor level of existing organisations. In the light of recent calls by organisational sociologists emphasising that 'we require more case studies in order to understand power relations [...] with a particular focus on political episodes at [the] operational or store level rather than headquarters-subsidary power relations.' (Geppert et al., 2014:3), the paper thereby also makes a methodical contribution as the proposed 'Analytical Framework for Studying Functions and Forms of Potentially Opposing Forms of Workplace Control' (see table 2, p.31 below) could be used to

provide future investigations of shop-floor micropolitics in (particularly in strictly hierarchical settings) with a solid methodological foundation.

For three, the systematic review of power related phenomena in platform-based on-demand work settings departing from Fleming and Spicer's taxonomy of 'sites and faces of power' presented in chapter 3 illustrates how socio-political concepts can be utilised to systematically provide comprehensive analyses socio-spatial and temporal dynamics of power beyond the investigation of isolated cases in course of systematic reviews geared towards unpacking overarching similarities and patterns of power-related processes in certain types of business models and specific branches.

Finally, the analytic template developed for the analysis of Uber in chapter 4 has proven valuable for the in-depth longitudinal analysis of both persistence and permutations of power relations. Thereby, it provides methodological blueprint that might support future analyses which aim to develop a more clear-cut understanding of the temporal dimension of micropolitical processes in various organisational settings.

Total institutions revisited: What can Goffman's approach tell us about 'oppressive' control and 'problematic' conditions of work and employment in contemporary business organizations?

Abstract

In this paper we shed light on the subjective, organizational and societal conditions which support the emergence and persistence of oppressive labor regimes in some sectors of developed market economies. Based on our analysis we develop a Goffman-based framework for analyzing asymmetric organizational power configurations and potentially problematic forms of work and employment in the context of business organizations. Our framework conceptualizes purposes and effects of organizational control, beyond functionalist approaches that focus narrowly on efficiency and the effectiveness of management. Our article aims to provide answers to the question of why work and employment practices – which have been labelled 'abusive' and 'precarious' in public and academic debates – have become highly persistent in some firms, even in 'coordinated market economies' like Germany where possibilities for employee voice are usually strong. We apply first- and second-hand data, based on the case of the internationally operating German food retailer Lidl, in order to highlight and illustrate key elements of our framework.

Keywords: *Oppressive organizational configurations, work and employment, retailing, total institutions, Erving Goffman, managerial control, organizational inclusion, precarious employment*

Introduction

Media stories on German hard discount food retailing (HDFR) tend to emphasize the apparent economic success of this business model. Since the 1960s, hard discounters such as Lidl and Aldi have become the dominant players among German supermarkets, holding more than 40% of the current market share (Dierig, 2014). The HDFR business model is based on a limited assortment of fast-moving items sold in large quantities at low prices in small- to medium-sized stores (Geppert et al., 2015). This model has spread rapidly across Europe. For example, Lidl, the second-largest food retailer in Germany, currently employs 335,000 people in Europe and has recently been named ‘grocer of the year’ in the United Kingdom (Alexander, 2015).

The *success of HDFR* can be explained by reference to mainstream business studies: Next to economies of scale, a major factor in the success of this business model is a rigid cost leadership strategy achieved by implementing strict measures of cost minimization. Next to Waltonist cost-cutting strategies aimed at optimizing purchasing and logistics as well as utilizing bargaining power with suppliers (Vidal, 2012) German hard discounters are particularly successful at minimizing labor costs (Wortmann, 2004), which are the second-largest cost factor in retailing (Broadbridge, 2002). In contrast to the low-wage Waltonist model, German HDFRs minimize labor costs by rigidly applying neo-Taylorist methods of rationalization. This includes rigid standardization, highly centralized authority relations, strict benchmarking and high formalization in order to maximize work output (Geppert et al., 2015; Wortmann, 2004). Additionally, HDFRs also mandate a significant degree of employee working time flexibility and apply techniques of ‘lean staffing’ to avoid high overheads and sunk costs (Artus, 2008; Geppert et al., 2015). The measures outlined above make perfect sense from a cost-leadership oriented managerial perspective. However, they bring along a ‘dark side’ that is easily overlooked when analyzing the business model through functionalist lenses, as the scandal of Lidl – one of the leading German hard discounters – indicates. In 2008, Lidl made headlines when it came to light that the company had systematically spied on its employees in the locker rooms and toilets of its stores. During the course of the scandal, Lidl was also accused of exploiting and suppressing employees, leading to a ‘climate of fear’ (Connolly, 2008) within the organization. These accusations were in line with earlier investigative union research that brought to

light problematic employment conditions such as harassment of ‘disobedient’ or underperforming employees, the denial of mandatory breaks, inadequate work–family balance and harsh forms of control in many of Lidl’s stores (Hamann & Giese, 2004; Hamann & Research Group, 2006).

These issues have recently been addressed in research on ‘*problematic*’ *employment conditions* (Artus, 2008) and ‘extreme work’ (e.g. Bozkurt, 2015) in retailing. It has been shown that the intensification of work within the retail sector often leads to physical and psychological exhaustion, accompanied by inadequate work–family balance (e.g. Henly & Lambert, 2013; Price, 2016; Wood, 2016). Additionally, several studies analyzed how German retail organizations utilize various techniques to suppress employee voice and avoid unionization and codetermination (e.g. Artus, 2008). Some of these findings also indicate that problematic forms of employment in retail are closely linked with the way retailers exert managerial control. Current work by Price (2016) has shown how lower level shop floor employees are exposed to info-normative, bureaucratic and direct personal control mechanisms and incentive systems. It also draws attention on control forms of shop floor employees in retail that can be labelled as strictly bureaucratic and highly output oriented (see also Child, 1984: 158–159).

To sum up, critical studies on retailing have focused on the operational and functional problems of specific forms of managerial control and related labor issues. They also point towards an *increasing precariousness of work and employment* and ethically questionable forms of organizational control. Some studies, especially in the tradition of the Labor Process Debate, arguably focused too narrowly on subjectivity and ‘resistance for its own sake’ without considering cases where resistance is highly absent and neglecting why this might be the case in some cases (Edwards, 2007: 11). Our article contributes here by discussing potentially ‘totalistic’ aspects of managerial control practices and how they are linked with problematic forms of employee inclusion in cases where resistance often appears useless. For example, Royle (2002) has demonstrated that the possibilities for resistance in the context of fast-food retailing are very limited. Drawing on a similar case, our contribution investigates the question of how subjective experiences at work are linked with the specifics of organizational and societal context. In short, we analyze how and why specific subjective, organizational and societal mechanisms interact and thus underpin both the

emergence and persistence of potentially oppressive labor regimes, which can broadly be seen as the underbelly of the economic success of the hard discounter business model.

Our focus is on the development of a *multidimensional conceptual framework* which distinguishes between three levels of analysis: the potentially ‘totalitarian’ or ‘totalistic’ aspects of managerial control, the specifics of organizational power structures and the problematic forms of organizational inclusion of employees at store level. For this purpose, we draw closely on key ideas of Erving Goffman’s (1961) seminal work on ‘total institutions’. Although Goffman clearly did not develop the original concept of total institutions (TIs) with business organizations in mind, his description of ‘misanthropic’ institutions such as work camps, prisons and military organizations seems to bear some structural similarities to media reports of oppressive work and employment practices in companies like Lidl. Similar to HDFRs, higher-ranked members of TIs develop various forms of strict managerial measures for controlling lower-ranked members in order to ensure rigorous obedience and prevent any form of resistance. These measures are designed to allow the efficient ‘handling’ of people to guarantee organizational efficiency, with the latter involving problematic and oppressive forms of organizational inclusion. Our basic argument is that elements of TIs – similar to those described by Goffman for non-business type organizations – can also be found in some ‘normal’ businesses organizations in Western capitalist economies which apply harsh forms of control with a zealous disciplinary purpose.

Our article unfolds as follows. After a short introduction to Goffman’s ideas on TIs we give a brief overview of our methods and data. We then systematically analyze Lidl’s ‘system of total control’ utilizing categories derived from Goffman’s work. Structured along these categories, we first look closely into the problematic aspects of employment and the often-precarious work situations of lower-ranked employees at Lidl. Second, we will refer in detail to the specific forms of managerial control, surveillance and punishment at Lidl. Third, we refer to the organizational power relations at Lidl and shed some light on the structural and societal underpinnings that support problematic forms of organizational membership. Based on the insights of this analysis we finally introduce our Goffman-based analytical framework which we believe can support future research on oppressive organizational configurations and can also be

applied beyond the specific case of Lidl for the study of problematic forms of work and employment in other business organizations. In the conclusion, we reflect on the contribution and implications of our analysis for further theory building and empirical application.

Goffman's Concept of TIs: How and why it Matters in the Context of Business

Organizations

Several contributions across various fields have utilized the concept of total institutions TIs to analyze the relationship between individuals, organizations and social structures (see, for example, Clegg's (2009) study of concentration camps, Tracy's, 2000, study of cruise ship employment and Farrington's, 1992, investigation of modern prisons). However, while many other key ideas of Goffman have fruitfully contributed to organization studies and industrial relations research¹ efforts to apply Goffman's concept of TIs for the analysis of business organizations are rare. Exceptions are Shenkar's (1996) study of Chinese state enterprises and research by Ezzamel et al. (2001) on the 'factory that time forgot'. This is unfortunate because Goffman's ideas on TIs – as we will illustrate in greater detail in this paper – seem valuable for studying problematic forms of managerial control and organizational inclusion in contemporary business organizations. In line with Stewart Clegg (2006: 427) we argue that 'Goffman's argument is that total institutions demonstrate in heightened and condensed form the underlying organizational processes that can be found, albeit in much less extreme cases, in more normal organizations'. Applying the concept of TIs therefore provides a fertile ground for the analysis of work and employment practices which have been labelled as 'precarious' or 'abusive' in the context of 'normal' business organizations.

The idea of TIs also fits somewhat with Foucault's (1975) writings on power, and especially with his idea of the 'panopticon', which has been widely used in the study of managerial and organizational control (see e.g. contributions in McKinlay and Starkey, 1998). However, in comparison, the idea of TIs puts a much stronger emphasis on the concrete social interactions which take place inside given organizational settings and how they are intertwined with specific forms of surveillance, control and punishment, at the subjective, organizational and societal

¹ See for instance studies on impression management (Dillard et al, 2000) and emotional labour (Grandey, 2000).

level.² Accordingly, we believe that studying organizational processes in business organizations through the lens of the TI concept will support critical scholars interested in developing a better understanding of why problematic forms of power-related social interactions unfold in specific organizational and societal contexts. The emphasis here is on the question of how interactions are intertwined with specific forms of managerial surveillance, control and punishment in a concrete organizational setting. Such an approach pays – in comparison to Foucauldian inspired studies on the subject – closer attention to the ‘lives of the ordinary people’ (actors) and how ‘they are made part of the structures of institutions at work’ (Hacking, 2004: 278). Taking Goffman’s theoretical lens, we are going to apply the idea of TIs to the case of Lidl and ask the question why ‘oppressive’ and ‘totalistic’ organizational configurations might emerge in the first place and, what is more, why they have become ‘normal’ and persistent forms of organizing and working in some firms.

According to *Goffman’s original concept*, TIs can be characterized as ‘encompassing’ to a high degree. This means they have the potential to include members of an organization in a much stronger way than other types of institutions due to the amount of power they exercise on them and the amount of time individuals spend within the organization. The common characteristic of these strictly hierarchical institutions is the exertion of significant control over members. Lower-ranked members in TIs are separated from the higher-ranked staff, meaning that there is almost no social mobility between these groups. This ‘staff-inmate divide’ is typical for TIs, thus creating two groups that lack a shared sense of community with each other. This causes a lack of solidarity and promotes a strong in-group/out-group mechanism.

Such a divide can also be related to the requirement of ‘efficiently handling people’ (Goffman, 1961: 15) within TIs. In order for organizations such as military organizations and work camps to remain effective, lower-ranked members are handled by a relatively small group of supervisors with a close eye on maintaining strict control

² In this respect, we agree with comparisons of the works of Foucault and Goffman of Hacking (2004). He points to the strength of Goffman’s interactionist approach, when it comes to the study of ‘making people’, in comparison to Foucault’s ‘archaeology’ by stressing that ‘Goffman’s work is essential for coming to understand how people ‘are made up day by day’ within an existing institutional and cultural structure’ (2004: 299). We agree with his conclusion that ‘Foucault gave us ways to understand what is said, can be said, what is possible, what is meaningful – as well as how it lies apart from the unthinkable and indecipherable. [However,] he gave us no idea of how, in everyday life, one comes to incorporate those possibilities and impossibilities as part of oneself. We have to go to Goffman to begin to think about that’ (ibid: 300).

over organizational operations. Therefore, daily routines are often tightly scheduled and executed under constant supervision from higher ranks. In order to achieve the narrow organizational objectives, much effort is put on developing tight control measures for members' behavior. Goffman describes different elements of control in TIs that can be labelled as surveillance, supervision, privilege and punishment. Surveillance is applied in various forms, including physical surveillance and output control. Different measures of supervision are aimed at influencing members' socialization. Furthermore, TIs establish distinct systems of internal privileges and punishments, rewarding obedience and punishing disobedience. Privileges often appear in the form of temporary relief from the usual regime of confinement. Similarly, they are predominantly 'internally focused', meaning that they are of limited consequence outside of the organization. These elements of totalistic control are intended to 'trim' the individual organizational members in order to prevent resistance and the emergence of counter-power.

Goffman's original, rather essayistic descriptions do not fully reflect in detail on the relationships of efficiency, structural power, problematic organizational inclusion and managerial control as interrelated facets. Nevertheless, his ideas on TIs provide a fertile ground for a systematic conceptualization of this kind of interplay. Most obviously, measures of control, surveillance and various forms of sanctions have a strong disciplinary purpose in TIs. At the same time, they solidify existing hierarchies by creating intimidated organizational members and thus serve to avoid resistant behavior. The other way around, it can also be argued that these asymmetric power relations, when accompanied by circumstances that bind members to the organization, make oppressive forms of control possible in the first place. Asymmetric power relations and mechanisms of strict control not only cause a problematic inclusion of members. Both aspects of totalitarian organizations are also put in place to ensure a high degree of organizational efficiency.

From a TI perspective suppressive forms of control in business organizations do not just display forms of deviance, aberration or managerial misconduct. Functionalist mainstream research on organizational control would interpret these phenomena as dysfunctionalities (see e.g. Child, 1984, for an overview), which need to be managed carefully in efficient organizations. However, from a TIs point of view forms of oppression can be understood as crucial elements of managerial control strategies which

ensure organizational efficiency. Similar to classic contributions that study non-business organizations from a TI perspective, certain types of contemporary business organizations are characterized by configurations of significant power asymmetry and problematic inclusion of members, which often create triggers for the establishment of suppressive forms of control for a large number of its members. However, it is also important to note that these control forms are not permanently applied at all times within TIs. Thus, in the case of certain TIs, e.g. military organizations or work camps, harsh forms of control are strongly linked to situations where organizational efficiency is endangered. That is why organizational configurations characterized by power asymmetry and a high degree of organizational inclusion can be regarded as a prerequisite for the emergence of suppressive forms of control and oppressive work and employment, which once they are established, often turn into more or less persistent conditions.

Research Strategy, Data and Methods

A key aim of the article is to *develop a Goffman-based framework* which enables us to better understand where and why oppressive forms of organizational control might emerge, and when and how they might persist. Our *selection of the Lidl case* for this paper is driven by three considerations: First, there is relatively broad media coverage plus some existing academic research which points to problematic employment conditions and strict control at Lidl. Second, we have access to a broad set of interview data collected from previous research on the company (Geppert et al., 2015). This is important as German hard discounters are known for having highly secretive communication approaches and for their efforts to hinder empirical research on managerial control, work and employment (Artus, 2008; Geppert, 2015; Hamann & Giese, 2004; Hamann & Research Group, 2006; Willenbrock, 2009; Wortmann, 2004). Third, next to our primary aim of theory building, studying the Lidl case also enhances the body of so far scarce studies on the specifics of work and employment within the organizational context of hard discounters.

We were able to access a set of *secondary data* on Lidl which consist of qualitative interview data (n = 78) with Lidl shop floor employees, middle managers and union officials in five European countries collected through previous research, and company documents and reports, compiled in a former study by Geppert et al. (2015). Even when the originally collected set of data was not so much focused on problematic control and forms of employment, it provided rich insights into the overall working environment of Lidl. Interviewees and documents also frequently refer to the 2008 surveillance incident at Lidl which received wide attention in media and politics in Germany and all over Europe. Additionally, the data set provides comparative information about the situation in other German retailing companies and retailing across Europe. These additional data helped us to triangulate our results with regard to the specific organizational, institutional and country-specific contexts which turned out to be crucial to make sense of the Lidl case.

In order to refine and enrich the primary findings based on our initial data analysis, we hence subsequently collected *additional secondary data*, namely media reports and internet coverage. In total, 36 additional contributions to established (primarily German) print and broadcasting media,³ which paid specific attention to problematic work and employment conditions at Lidl were included in our analysis. Furthermore, we collected 55 reports of current and former Lidl employees, which are available openly on the internet. In line with other scholars in work and employment studies (e.g. Richards & Kosmala, 2013), we regard this kind of content analysis based on internet sources as a valuable method to get access to critical employee voices with regard to their working conditions. We especially used the internet platform ‘kununu’, Europe’s largest employer rating platform, where employees can anonymously share their experiences with certain companies.⁴ These data were sampled and coded according to references made about employment conditions perceived as problematic, particularly in relation to problems such as store management and employment relations at Lidl in order to deepen our understanding of the employee perspective and gather further contextual information. Table 1 provides an overview on the data utilized in the course of our analysis.

³ These are Manager Magazin, Stern, Spiegel, Handelsblatt, Frankfurter Allgemeine Zeitung (FAZ), Die Zeit, Guardian, Deutschlandfunk and Rbb.

⁴ Next to standardised ranking categories (such as work atmosphere, behaviour of superiors, wages, work-life balance) employees are also able to write own reviews on this platform.

Table 1. Data Sources

<i>Data Type</i>	<i>Number</i>	<i>Description & Role in Research Process</i>
<i>Qualitative Interviews</i>	78	Interviews held with 10 managers above store level, 16 store managers and deputy managers, 15 store employees and 37 union or employee representatives in course of former research process focussing on employment relations at Lidl and other retailers in five European countries (detailed description see (reference removed for blind review) used to capture employees and manager's subjective perception of employment conditions and gather insights on forms of managerial action at Lidl. The interviews were used for explorative stages in the research process, to develop the categories and codes and develop initial assumptions on the interrelations between different categories. In a later stage of research, the interviews were used for cross-comparison between different retail formats and institutional contexts.
<i>Newspaper articles</i>	36	Articles from renowned magazines and newspapers addressing the so-called 'Lidl scandal.' These sources are used as illustration of problematic employment at Lidl and to shed light on the company's organizational structure and corporate culture.
<i>Internet sources</i>	55	Reviews by Lidl employees (shop floor: 40, management: 11, other (e.g.IT): 4) on employer rating platforms. These reports describe problematic aspects of employment at Lidl, illustrate the problematic exit options of employees, the variability of employment conditions between administrative units, management and the shop floor and the corporate culture of Lidl. The data set was used for the triangulation of the analysis of interviews and newspapers.

Source: Own compilation.

When investigating the Lidl case in terms of structural reasons for suppressive managerial behavior, we developed an initial heuristic framework containing questions derived from Goffman's TI concept and examined interrelations between problematic inclusion of organizational members, managerial control and power structures. Table 2 gives an overview on this *heuristic framework*.

Our subsequent analysis of the 'system of total control' at Lidl is structured according to the outlined analytical categories in the table. After developing this framework based on Goffman's concept and initial explorative data analysis, we coded our data according to these central categories (Strauss & Corbin, 1990). As mentioned above, similarities between Lidl and Goffman's classic concept of TIs were triangulated with data collected in other internationally operating food retailers which do not apply the hard discounter format (i.e. the hypermarket format). The specific cost-leadership business model of Lidl and the specific socio-institutional context of Germany were seen as crucial contextual factors when we made sense of the problematic conditions found at Lidl.

Table 3 provides an overview on the outcome of our data analysis. The findings presented in the subsequent sections are based on these data. The first column displays the central categories along which we organized our data analysis. The frequency of quotes from our data assigned to each category is listed in the second column. Each category is related to several specific aspects which are represented by different sub-codes assigned to this category. The sub-codes which address these aspects are indexed in the third column.

Table 2. Analytical Framework for Studying Functions and Forms of Potentially Oppressive Forms of Workplace Control

<i>Level of analysis</i>	<i>Concepts derived from total institutions</i>	<i>Analytical questions</i>
<i>Problematic inclusion</i>	Precarious working conditions	Can working conditions be labelled precarious because of factors including high work intensification, high demand for flexibility, problematic work-family-balance, high workforce fluctuation and instability of employment relations (temporary employment)?
	Encompassing character	Does the organization demonstrate encompassing tendencies, high demands for flexibility or engagement during spare time? Are other private commitments affected by organizational membership?
	Involuntariness/ 'stickiness' of membership	Is membership "sticky" or (gradually) involuntary due to poor exit options, the low labor market position of employees or normative or economic pressures?
	Employee voice	Can the position of members in the lower ranks of the organization be characterized as lacking power?
<i>Managerial control</i>	Surveillance	Is a large emphasis placed on the close surveillance of employees?
	Coercive control	Are measures of coercion used, e.g., (internal) punishment, looping, trimming or establishing fear? Is control used for the purposes of intimidation, getting rid of employees or preventing unionization?
<i>Organizational power structures</i>	Reification of asymmetric power	Are there management activities aimed at impeding participation and resistance, employee voice, and coalition-building?
	Strict hierarchy/staff-inmate divide	Is there a strict organizational hierarchy? Is inter-organizational social mobility limited? Is there a lack of empathy between different ranks and groups of employees?
	Efficient handling of people/general need for efficient control	Is there a high demand for efficient control of members in order to successfully implement a certain business model?

Source: Own compilation derived from Goffman (1961).

Problematic Inclusion

As already indicated, Lidl pursues a strategy of strict cost leadership based on neo-Taylorist forms of work and employment organization in order to radically minimize personnel costs. Numerous rules and regulations prescribe that work tasks are carried out as quickly as

Table 3. Overview of Results of Data Analysis: Categories, Coded Quotes and Assigned Sub-Codes

<i>Category</i>	<i>No of coded quotes for category</i>	<i>Sub-codes assigned to category</i>
<i>Problematic inclusion & employment conditions</i>	84	Being on call, forms of work contracts, work-family balance, intensification of work, scheduling, rules, denial of breaks, physical and psychological exhaustion.
<i>Managerial control and punishment</i>	79	Surveillance, rewards & punishments, preventing solidarization & unionization, looping-strategies.
<i>Organizational power structures</i>	89	Shop-floor-management relations, inner-organizational mobility, organizational hierarchies, fluctuation, forms of employee representation, power asymmetry.
<i>Business model</i>	67	Rationalization, formalization & standardization, lean staffing.
<i>Socio-institutional context</i>	71	(Re-)commodification, exit options, labor law and codetermination rights, socio-demographic characteristics of workforce.

Source: Own compilation.

possible and in exact detail. This tight scheduling of activities is similar to processes described originally in the context of Tis and leads to extreme intensification of work at Lidl stores. Lidl engages in both rationalization and bureaucratic control to a high degree. For example, cashiers at Lidl stores in Germany are required to scan 40 items per minute (Hamann & Giese, 2004), a target which is significantly higher than that of other retailers (for comparison see e.g. Price, 2016: 11, who reports about targets of 19–20 items per minute). This has led to descriptions of Lidl's employment conditions as 'permanent work overload accompanied by tight timing' (Grumbach, 2008, translation by authors).

This is in line with many statements in our data that highlight the fact that it is extremely challenging for store managers and employees to meet the prescribed performance targets. For example, one employee reported that ‘the supposedly high salaries look not that high if you consider that you always have to give 100%. Thus, you are exhausted quickly. Burnout!’ (Grumbach, 2008, translation by authors) Another employee complained:

‘we always get tight time requirements, always pressure, like slavery. The sickness rates at our store increase. Some employees, including me, are afraid of starting to work in the morning. I’m sick every morning. A colleague just told me she is trembling and has nausea.’(ibid.:76)

As these statements illustrate, many employees also report about high levels of physical and psychological stress and a lack of autonomy in their daily work. Furthermore, employees have frequently been asked to skip mandatory breaks and stay longer than required to finish their daily tasks (Artus, 2008; Hamann & Giese, 2004; Hamann & Research Group, 2006).

The goal of keeping personnel costs to a minimum is closely linked with highly flexible work and organization patterns. Consequently, employees not only face high demands for flexibility but also report problems in their work–life balance. The negative effects of high demands for employee flexibility are intensified because many part-time employees have to work additional shifts to receive sufficient incomes. This also represents an outcome of Lidl’s strict HR policies. Most Lidl store employees are employed part-time with just a few guaranteed shifts; meanwhile, additional employment at other companies has been prohibited in certain cases, which is well documented in our data. Thus, dismissal is highly likely when Lidl management finds out about employees who work elsewhere. Additionally, managerial processes of allocating a limited amount of guaranteed working hours to part-timers often created ‘double-bind’ situations, where some employees had little choice as to accept the additional shift assignments even at short notice, because they need the income. In order to get these extra shifts, several reports document that employees constantly have to be ‘on call’. If they are not ‘always available’ they either do not get extra shifts or face harsh disciplinary measures which can quickly end up in dismissals. Whereas Goffman’s ‘classic’ TIs were encompassing because the ‘inmates’ were permanent ‘residents’ within the ‘walls’ of the organization, recent research noted that modern communication technologies together with flexible short-term scheduling can

also lead to problematic situations of hyper-inclusion for many employees in business organization (i.e. Sullivan, 2014; Wood, 2016). This can be observed in the case of Lidl, where constant demands for availability, extra hours and other requirements to be highly flexible create an encompassing character of organizational membership.

At the same time, we see structural and societal influences which have a kind of moderating role for keeping the Lidl system alive, especially its TI like features. Many of the employees who are affected by the outlined problematic and potentially oppressive employment conditions stress that they are strongly bound to their employer. A key reason for this situation is economic pressure. The wages at Lidl are above average in the industry across Europe and are also perceived as ‘enormous’ and ‘the only good thing [at Lidl]’ by many employees, even when they are critical about work and employment conditions. These comparatively higher wages are used extensively by the company to attract new employees and monetarily compensate current employees in cases where they suffer from problematic work and employment conditions. A former Lidl manager describes this approach as a crude economic incentive in an interview with the German newspaper *Spiegel* (Amann & Tietz, 2012: 122): ‘This [payment system in combination with high task densification] makes sense — you pay 30% more and get 100% more performance’.

Additionally, socio-demographic characteristics of Lidl employees explain why resistant behavior hardly appears and oppressive control is accepted. Most Lidl employees are female, low-skilled and (in urban locations) often with migrant background (Artus, 2008). These employees have weak labor market positions and limited ‘exit options’ (Carre´ et al., 2010; Van Klaveren & Voss-Dahm, 2011). Additionally, they often exhibit an attitude of ‘better any job than none at all’ (Hamann & Giese, 2004). This diagnosis is mirrored in our data; a wide range of statements highlight that many employees feel negatively affected by Lidl’s employment conditions and would consider leaving if they would see alternative employment prospects with similar payment rates. Thus, membership can be characterized as ‘sticky’ as a result of these socio-economic circumstances. Thus, limited exit options explain why many employees often decide not to leave despite problematic employment conditions.

Managerial Control

As already indicated, Lidl places a great deal of emphasis on detailed instructions, rigid benchmarking, performance indicators and highly formalized rules which are rooted in neo-Taylorist forms of employment organization. The 2008 surveillance scandal revealed that the corresponding set of strict but legitimate control practices was accompanied by more severe forms of questionable and, in some cases, illegal practices. A cover story by the German magazine *Stern* (Grill and Arnsberger, 2008) brought to light that Lidl had spied on employees with hidden cameras and microphones in some of their stores, a measure which went far beyond ‘normal’ (and legal) surveillance measures. Based on audio material and observations, private investigators also drafted reports about employees’ private lives, relationships with co-workers and their general attitude towards their employer. Similarly, employees stated that their pockets, bags and cars were frequently checked by their superiors. These drastic measures were justified as prevention against theft. Likewise, the atmosphere in many Lidl stores has been described as ‘militaristic’ (Hirn et al., 2007), based on strict top-down orders and full of mistrust, resulting in cases of harassment and rigid hire-and-fire policies (see also Hamann & Giese, 2004; Hamann & Research Group, 2006). Closer investigations indicated later that, contrary to initial headquarters’ statements after the scandal, these activities were conducted in a systematic manner with knowledge of upper management. This led to descriptions of Lidl as a ‘paranoid system’ of ‘surveillance mania’ in several newspapers (Amann & Tietz, 2012), as well as in some of our interviews.

These rather extreme controlling measures point clearly to the existence of a ‘system of rewards and punishments’, which looks quite similar to those described in Goffman’s (1961) classic concept of TIs. Similar to the cases reported by Price (2016) for other retailers, we also found that Lidl employees who complied with short-term demands for flexibility and intensified timing of work tasks can benefit by being assigned to ‘attractive’ additional paid shifts and by not being scheduled during ‘unsocial times’, such as evenings or weekends. Beyond that, Lidl store managers’ authority to assign shifts was also said to be used as an instrument to punish ‘disobedient’ staff members or employees. For example, extra shifts requested by those employees were denied and their regular shifts were systematically placed at unpleasant times or rescheduled at

short notice.⁵ Moreover, punishment by denial of mandatory breaks and control of access to toilet keys by superiors were reported (Hamann & Giese, 2004). Such highly personalized controlling practices also exemplify the deprivation of individual rights which are usually taken for granted in developed capitalist societies. These sanctions have an ‘internal’ nature similar to those in Goffman’s TIs. They can also be interpreted as measures of ‘trimming’, where individuals ‘allow [themselves] to be shaped and coded into an object that can be fed into the administrative machinery of the establishment [...]’ (Goffman, 1961: 25).

Lidl’s control practices are not just limited to such ‘reactive’ forms of punishments. Instead, some practices actually seem to be intended to induce misbehavior only to punish it afterwards. Employees ‘in the doghouse’ are sometimes assigned to impossible tasks and then punished for not being able to complete them. As one employee explained, ‘the tasks are designed in a way that they cannot be accomplished. And if you cannot accomplish them [...] they tell you that you are incapable’. Similarly, employees that the company wants to fire have been lured into a ‘trap’ by purposeful test purchases, which are officially intended to ensure service quality and prevent customer theft:

Test purchases are frequently used as grounds for dismissal. If they want someone to fail, they have many opportunities to trick us cashiers. For example, two big boxes of milk are put in the shopping trolley and a package of coffee is hidden in the lower one. [...]. If we check every customer to see if he is hiding something this way, we would never meet the requirement of 40 scans per minute. (Amann & Tietz, 2012: 133, translation by authors)

These controlling techniques are similar to Goffman’s notion of ‘looping’, where the individual’s protective response to one assault is used as the basis for another punishment (Goffman, 1961). As a result, several employees described working conditions at Lidl as embedded in a general ‘climate of fear’. The aforementioned ‘stickiness’ of organizational membership seems to be an important factor in this environment because it increases the probability that such practices are ‘tolerated’ by employees, because they see no exit options (e.g. better paid employment elsewhere).

⁵ As the (perceived) influence on shift assignment has proven to be a strong factor moderating the negative effect of flexible over-hours (Henly and Lampert, 2013), the enforced assignment can be seen as a kind of punishment from an employee perspective.

Lidl also uses mechanisms to hinder the emergence of social relationship building between their employees. For example, performance indicators are made public in many stores to establish a climate of fierce individual competition between employees. We have also learned of cases where managers and employees who started to develop closer social contacts during and after work were strategically posted in other stores or assigned to different shifts. In the view of several interviewed employees, these measures are aimed at hindering the development of solidaristic relations among the workforce because they could potentially lead to the formation of formal and informal collective actions including open forms of collective resistance or even the formation of works councils. Works councils are extremely rare in the case of Lidl. The key reason for this situation is an open anti-union policy which actively focuses on discouragement of any union and employee representation activities at store level which includes harassment of employees who did manage to establish works councils against managerial efforts of blocking such initiatives (Hamann & Giese, 2004). To quote an employee, it is ‘dangerous if everybody has the same opinion! In the worst case they could establish a works council’. The role of anti-unionism in many of the German hard discounters has been covered in several studies which also point to the methods by which firms are able to successfully prevent the foundation of works councils and any forms of unionization (e.g. Artus, 2008; Tilly & Carré, 2011; Wortmann, 2004), despite the rather strong legal framework aimed at protecting employee rights and voice in Germany.

In sum, three questionable forms of managerial control have been identified: First, Lidl appears to engage in measures designed to intimidate employees and render them obedient to all kinds of organizational efficiency demands. Second, there are various social techniques in place to discipline and remove potential ‘troublemakers’ and those considered as unproductive. Third, there are policies and measures that are intended to actively prevent social relationship building among employees, coalition building and collective actions leading to any forms of organized labor.

There seems to be a clear strategy in place which both directly and indirectly focuses on wiping out resistant behavior and independent decision-making. These mechanisms resemble to those described by Goffman, and they cannot be captured in studies focusing on functionalist or ‘operational’ notions of organizational control.

Organizational Power Structures

As we have seen the controlling and problematic inclusion patterns described above are bolstered by both specific organizational and societal institutional characteristics. This leads to strict and severe power asymmetries between management and labor, within the managerial hierarchy and at store level, especially in the German context. In order to understand how these power asymmetries are established and maintained, we consider four points as particularly important:

First, it is important to shed light on the strict organizational hierarchy and the corresponding role of middle managers in the Lidl system. It has been noted that retail store managers face the near-impossible task of balancing employees' needs of having decent working conditions with the overwhelming organizational demands for continuously improving efficiency of store operations (Lehndorff & Voss-Dahm, 2005). Research has also revealed that managers are highly constrained by centrally set performance measures and budgets that heavily dictate allocation of work and leave little room for autonomous decision-making especially at store level and beyond (Grugulis & Bozkurt, 2011; Price, 2016). When explaining the problematic inclusion of lower-ranked employees, it is important to note that Lidl's store managers themselves are put under immense and continuous pressure to keep costs under control and meet strict performance measures. A former Lidl manager expressed this vividly in an internet review:

The system is constructed in such a way that each superior closely watches his inferior and puts him under immense pressure. Store managers, district managers, regional managers. Even if you have a 'good guy' as store or district manager - they will sooner or later abandon their ideals because they will otherwise become victims of harassment themselves. Either they abide by the Lidl system or they will be fired. (Translation by authors)

These practices have led to high turnover of low- and middle-management employees at Lidl especially in the early career stages before they have become socialized into the Lidl system. In our view, they are also a key reason why many managers, if they have been socialized into system, 'go beyond the limits' (Straub, 2012: 315, translation by authors), 'pass the buck down' to lower-ranked employees and start to engage in not just passively passing down harsh disciplinary measures but also actively supporting and implanting them.

Second, the acceptance of questionable and sometimes openly oppressive behavior on the part of managers is indirectly and directly encouraged by a management system and a ‘culture of fear’ which discourages lasting emphatic and team-oriented behavior and thus hinders mutual understanding and close collaboration between higher and lower managerial ranks. These effects are also present in Lidl’s recruitment and employment policies. Interviews as well as publicly available newspaper coverage indicate that staff who want to move up the Lidl hierarchy need to show total acceptance of the ‘rules of the game’ of the Lidl system. The top managerial team is also reportedly required to develop fairly close social relationships with the owner family which remains involved in formulating overall strategy and occasionally even in parts of the daily business of the firm (Kühn & Salden, 2017). Middle- and lower-ranked managers who want to move up the hierarchy are expected to ‘be (extremely) loyal’ and get quickly sacked when they become too independent or critical thinkers (Hirn et al., 2007). Additionally, middle and increasingly also store managers now are recruited from business schools and departments and only ‘survive’ when they very quickly adapt to the Lidl system and its top down ‘militaristic’ (Hirn et al., 2007) style of management. Moreover, underperforming store and middle managers, like district and regional managers, are supposed to meet strict performance measures and compete with one another, which again leads to the result that only the ‘fittest’ for the Lidl system will have a chance to stay and climb the hierarchy. Additionally, store-level managers are frequently reassigned to other stores, not just in emergency cases such as a shortage of personnel but also when they are seen as being disobedient or ‘too soft’ when managing their stores. These common practices are aimed at preventing the emergence of friendly relations between store managers and employees but also with store managers and their superiors. Such circumstances, which Goffman would have called a ‘staff-inmate divide’, can clearly be related to Lidl’s narrow emphasis on meeting benchmarks and performance indicators and discourage any efforts of team building and collective action.

Third, the absence of formal employee representation at hard discounters such as Lidl (Artus, 2008) is a key reason explaining why resistance against questionable employment practices often remains limited to cases of individual action. Thus, any collective action and resistance appear not just to be ‘useless’ (Royle, 2002) but is also seen as rather dangerous by employees. We already described the measures taken to

prevent the emergence of social ties at store level. Similarly, harsh techniques employed to get rid of employees have been mentioned. It has been noted (Artus 2008; Geppert, 2015; Geppert et al., 2015) that employees campaigning for the establishment of works councils, which is supported legally, are one of the primary targets of such actions. Lidl's strategy for preventing unionization consists of several additional elements. As wage levels at Lidl adhere to the sector's collective agreement and are sometimes even higher, one important trigger for collective action is eliminated (Störkel & Steger, 2013). Additionally, the oppressive atmosphere captured in the metaphor of a 'culture of fear' discourages many employees to take on any 'risky business' especially when it comes to setting up a works council, which requires official elections.⁶

Fourth, Lidl's specific formal structure is seen as an arrangement to bypass employee representation (Artus, 2008; Hamann & Giese, 2004). Each Lidl store formally represents an independent company within the umbrella holding company with a small number of employees. As a minimum of five adult employees, who have been employed for six months, is legally required⁷ to set up a works council, the establishment of this representation body is generally not possible in some establishments. Furthermore, the high number of part-timers and a high turnover of workers prevent efforts to establish employee representation (Artus, 2008; Wortmann, 2004). In short, as German broadcaster Deutschlandfunk noted, 'these retailers [...] are highly hostile towards unions and works councils. They make large efforts to make sure the 'Betriebsverfassungsgesetz' [German Works Constitution Act], which provides employees with notable rights, is not applied in their stores' (Grumbach, 2008, translation by authors). In the most drastic case, Lidl shut down a well-performing store in the city of Calw in 2005 because a works council had been established there (Seith, 2005). The company reopened another store nearby a few months later. The absence of employee representation and the employment conditions described can therefore be seen as a product of regulation gaps within the German industrial relations system, which helps Lidl to actively follow and maintain its anti-workers' representation policies. Comparative international research has shown that Lidl's employment conditions in other European countries are less 'problematic' if host

⁶ These rules work usually fine for medium-sized and large firms in industrial sectors which are strongly unionised in Germany. However, they have severe limits in the contexts of small firms and non-unionised and weakly-unionised firms, like Lidl.

⁷ See English version of the Works Constitution Act published by the German Federal Ministry of Labour and Social Affairs (2009).

country regulations do not provide opportunities to bypass legal obligations (Geppert et al., 2015; Geppert, 2015). Lidl's success in bypassing German legal obligations combined with the weak labor market position of the local workforce is an important factor for both the stability and stabilization of significant power asymmetries between management and labor. Ultimately there are rather meagre power resources for employee strategizing approaches in order to gain influence to change unfavorable and often harsh conditions at work at Lidl. This is in direct comparison to other industrial sectors and organizational contexts in Germany, a country which is usually understood to be comparatively employee favoring because the industrial relations system provides robust possibilities for employees to negotiate with local management (Geppert et al., 2015).

Towards a Goffman-Based Framework for Studying Potentially Oppressive Organizational Configurations

Our analysis has suggested that there are several similarities between the German Lidl case and Goffman's classic concept of the TI. Similar to Goffman's TIs, organizational membership at Lidl can be labelled as 'sticky' in many cases. High flexibility demands create an encompassing system of organizational inclusion. The strict hierarchical relationships characterized by a 'staff-inmate divide' and significant power asymmetries at various levels and especially between employees and management are solidified by various techniques of coercive control. Forms of managerial control at Lidl are aimed at enforcing obedience, sorting out 'troublemakers' and preventing the emergence of social relationship building among employees horizontally and vertically across hierarchical levels. From such a perspective, we can conclude that they resemble the 'totalitarian techniques' of surveillance, internal punishment, looping and trimming described by Goffman. While Lidl cannot be compared to some ideal-typical examples of TIs with regard to the degree of harm done to employees, the number of structural similarities concerning the role of managerial control practices in relation to organizational structures and conditions of inclusion between Lidl and other TIs is surprising given that the original concept was not intended to apply to any kind of Western-style business organizations.

This study of Lidl is not only valuable as it sheds some light on the barely studied field of hard discount retailing in and beyond Germany. The paper has also developed a new and alternative conceptual angle, because the case study provides a useful example of the close interplay between organizational power structures and questionable forms of organizational control which are triggered by narrow managerial quests for maximum efficiency, undermining the prospects for 'good work' and decent employment conditions. We believe that our framework might be useful for the study of such 'totalitarian tendencies' in managerial control in other types of business organization. A specific combination of an efficiency-seeking business model, strict hierarchy and rigid neo-Taylorist management practices may not lead to 'abusive' employment conditions in all of these cases. However, the emergence and persistence of such totalitarian tendencies is highly likely in cases where we find specific organizational configurations in place, as we have illustrated in reference to the case of

Lidl.

Therefore, we would like to highlight that a Goffman-based framework allows us to conceptualize and thus better understand how the different elements of ‘oppressive’ organizational configurations interplay and thereby have the potential to mutually reinforce and stabilize each other. Managerial control, for example, is exerted to reinforce hierarchical relationships and avoid solidarization on a structural level of systemic power. These asymmetric power structures then provide the foundation and tools for establishing harsh forms of managerial control. Similarly, both strict hierarchical structures and tight managerial control have a negative impact on the conditions of organizational inclusion. This often leads to an intimidated and trimmed workforce that regards resistance as ‘useless’ that, in turn, allows the reification of existing structures and control practices. Thus, our analysis could inform future critical studies on ‘totalitarian tendencies’ in contemporary business organizations by providing an analytical framework that allows for systematic consideration of specific organizational configurations of structural characteristics and managerial practices leading to problematic employment practices. Such a framework should focus on the shape of and interrelationship between ‘Efficiency demands’, ‘Control practices’, ‘Inclusion of the workforce’ and ‘Structures of power’ (which could, in short, be addressed as ‘ECIS-relations framework’). Figure 1 represents an attempt to visualize such a theoretically and empirically informed ECIS-relations framework. Our figure points to key findings of our analysis but also show how our framework could be applied to similar cases in the context of business organizations.

Contributions and Conclusions

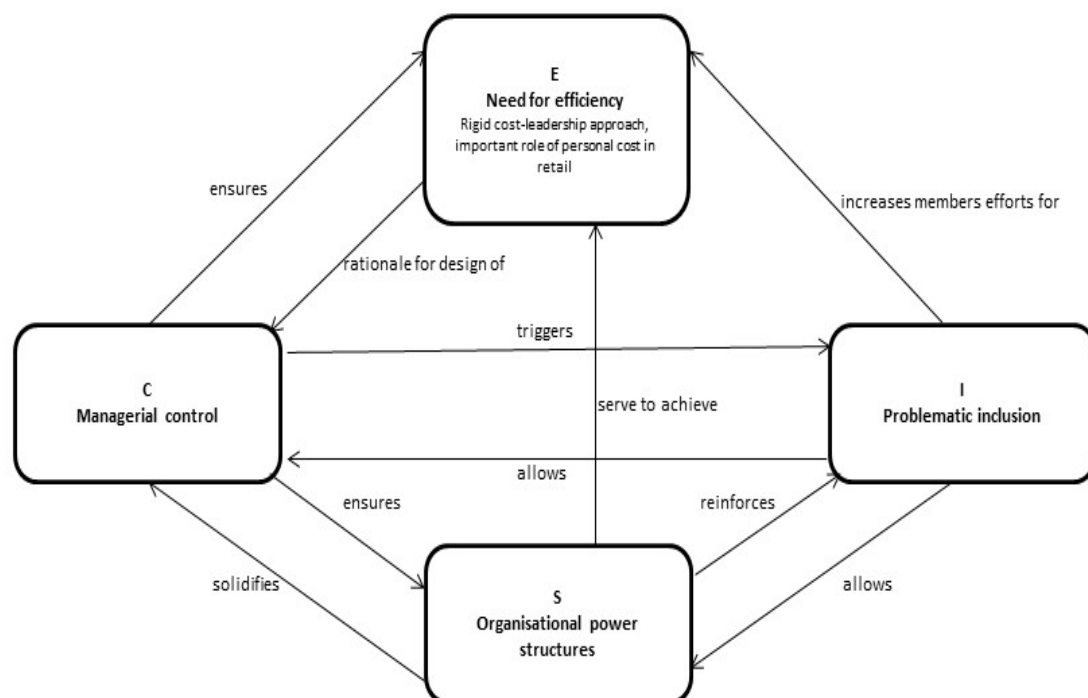
Our article highlights five important aspects of how our Goffman-based analysis and framework might be fruitful for further research on potentially oppressive organizational configurations in the context of business and management.

First, the ECIS framework helps to conceptualize the effects and purposes of organizational control beyond functionalist notions that merely consider the role of control for the better regulation and management of organizational work processes. Our framework allows us to unveil how certain measures of control reify existing asymmetrical power structures in organizations by preventing the formation of resistance and employee voice because they serve ‘well’ for ensuring employee compliance, even in situations when the employment conditions are perceived as unfavorable. It thereby highlights the disciplinary and power-related ‘secondary facet’ of control that needs to be further studied in future research on managerial control in the context of retailing and other business contexts.

Second, our study suggests that a research focus on the conditions for the emergence of oppressive labor regimes in relation to the specifics of single corporate establishments might be quite useful. Harsh forms of managerial control and abusive punishments do not manifest in every Lidl store in the same way and at any time. The emergence of harsh control mechanisms is likely in times when performance indicators are not met, and store managers are consequently put under severe pressure by upper management. As a former manager stated, ‘as long as everything goes well, it is okay. As soon as something goes wrong, the employee has no escape’. This can be explained by considering the specific ECIS relations shown in Figure 1. All ‘ingredients’ for abusive practices (i.e. a staff–inmate divide, a militaristic culture, the lack of robust tool kits for resistance) are ‘ready for use’ in Lidl establishments, and the story of abusive managerial practices is likely to unfold in situations where managers perceive a danger of missing narrow performance targets. This adds an important aspect to Lehdorff’s and Voss-Dahm’s (2005: 301) diagnosis that the middle management and store managers are constantly challenged to ‘reconcile service quality with cost efficiency’. In company settings where managerial mindsets, the threat of (internal or external) sanctions and non-existent employee representation mechanisms make it possible not to take any legitimate employees’ interests into account, the likelihood

of the emergence of abusive practices is highly likely. In contrast, we also suggest that our framework helps to explain why problematic employment practices do not emerge in other organizational contexts where important building blocks for the emergence of ‘totalitarian tendencies’ are weak or absent. Third, a Goffman-informed analytical lens helps to explain why oppressive employment regimes can become highly persistent in some cases. Lidl as an example first received broader public attention and critique when the firm’s strict anti-union practices were revealed in the ‘Black Book’ on Lidl (Hamann & Giese, 2004).

Figure 1. ECIS-Relations Framework



Managerial Control		Organisational Power Structures		Problematic Inclusion	
Concepts derived from Total Institutions	Example: Findings in case of Lidl	Concepts derived from Total Institutions	Example: Findings in case of Lidl	Concepts derived from Total Institutions	Example: Findings in case of Lidl
Surveillance	Surveillance via CCTV, spying, checking employees cars, pockets and bags, audio-taping employee conversations.	Reification of asymmetric power	Union bashing, techniques of getting rid of employees, bypassing regulations.	Precarious working conditions	High densification, temporary contracts, unpaid over-hours, burdensome work leading to physical and psychological problems.
Coercive managerial control, (internal) Punishments and Rewards, Looping, Trimming	Establishing a 'climate of fear: Denial of toilet-keys, test-purchase-traps, assignment of 'bad' shifts, rigid benchmarking, hire and fire policy, techniques to get rid of underperforming, troublemaking or disobedient employees, techniques to avoid social relations and solidarisation.	Strict hierarchy	Strict hierarchical organisational structure and culture, no internal labour market (upward mobility).	Encompassing character	High demand for short term flexibility. Problems with work-life-balance.
		Staff-in-mate divide	Lack of solidarity and feeling of community between staff and management.	Involuntariness/ stickiness of membership	Economic pressures (relatively high payment combined with weak labour market position), commodification, stigmatization of unemployment.
				Employee voice	No employee voice.

Source: Own compilation derived from Goffman (1961), adapted for the study of the Lidl case.

But even after major public critique following the 2008 surveillance scandal, not much seem to have changed in the Lidl system. More recent media coverage continues to point to problematic conditions at Lidl and other hard discount retailers (Kopplin, 2012). There is also some evidence that since 2008 some efforts have been made, especially attempts to improve Lidl's public image, 'professionalizing' parts of the firm's human resource and public relations management system and by slightly increasing staffing levels at some stores (Kühn & Salden, 2017; Preuss, 2015). Nevertheless, it can also be assumed that these 'episodic' changes had no significant influence on the 'systemic' power structure (Clegg et al., 2006) of the firm and the established managerial control practices which are based on a deep-rooted and taken-for-granted managerial belief system.

Fourth, our analysis and framework points to the importance of paying closer attention to the specifics of the institutional preconditions, which support the occurrence of oppressive organizational configurations. However, further research is needed on the question of why we see the emergence and persistence of oppressive labor regimes even in societal contexts such as Germany, where many scholars of comparative industrial relations would not expect them. As shown Lidl has proven quite successful in resisting institutional and societal pressures for the establishment of any forms of codetermination and employee voice mechanisms all over Germany, by strategically 'operate[ing] at the periphery of the national employment relations system' (Geppert et al., 2015: 243) and using 'gaps and cracks' in the German industrial relations system (Artus, 2008).

Finally, we would like to stress that our paper also goes beyond classic studies on the new role of managerial surveillance and disciplining the workforce, triggered by increased rationalization and efficiency seeking in the manufacturing sector (e.g. Sewell & Wilkinson, 1992). A major focus of these studies was on the role of new Japanese production concepts, like Total Quality Management and Just-in-Time production, on the quality of work and employment at the shop floor and for middle managers. Our contribution highlights that intensified surveillance and strong emphasis on disciplinary measures have also become quite common and sophisticated techniques of managerial control in non-manufacturing industries and here especially in the so-called low-skilled service sectors. Furthermore, our framework highlights the cultural, institutional and economic embeddedness of these practices both at the organizational and societal level. We therefore believe that our proposed ECIS-relations model can

inform further empirical research in other organizations and industrial sectors where employment practices have turned out to be ‘oppressive’. This might include research on problematic employment practices and the politics of production in non- Western parts of global production networks and supply chains in retailing as well as in other service and manufacturing sector workplaces in the West. Recent media coverage has shown a wider spread of highly problematic employment conditions in Germany and also in other so-called coordinated market economies. Thus, reports, for example, on firms operating in Germany like Amazon (Ernst, 2015; Fiedler et al., 2013) and mail-delivery subcontractors (Holst, 2012) have demonstrated that similar developments elsewhere are not just possible, but also seem to expand across the German economy and society. Therefore, further research is important from a socio-political angle because it could contribute to further theory building that seeks to explain the interrelationship among organizational characteristics, divisions of labor, modes of control and spheres of institutional and societal regulation.

The Dynamics of Power and Resistance in Platform-Based On-Demand Labour Arrangements: A Literature Review Through the Lens of Socio-Political Theory

Abstract

The role of power in platform-based on-demand labour has been emphasised in the emerging field of research on the so-called ‘sharing economy’. Various contributions document how power is exercised by platforms based on different mechanisms and techniques to ensure fluent operations in the digital economy. Similarly, existing studies highlight both individual and collective political activities by which workers and other stakeholders attempt to resist certain platform policies. Against this background, the existence of power asymmetries between platform providers and platform workers is emphasised based on various empirical observations. However, we hitherto lack a systematic overview on the role of power in platform settings that links these empirical insights on the socio-political dynamics in platform arrangements to existent theories and concepts of power in management and organisational theory. Addressing this gap is important as existent findings indicate that power is a crucial aspect to understand platform-based organisation, which however, is not fully conceptualised in existent scholarship. Particularly, platform research so far lacks theoretical conceptualisations for comparative studies of heterogenous platform settings and analytical blueprints to investigate prerequisites, pathways, and patterns of change of power relations in these settings which could be provided based on elaborated theoretical insights from socio-political scholarship in organisation and management. This paper addresses this gap by exploring findings on the role of power in platform arrangements as well as the core phenomena relevant to understand power in such settings based on a systematic review procedure. The findings are organised based on the seminal taxonomy of episodic and systemic ‘faces of power’, namely coercion, manipulation, domination and subjectification. Based on this synopsis I discuss avenues for enhancing further platform research through the conceptual lens of power theory as well as how findings from the empirical field of platform-based organisation provide inroads for future socio-political theory development.

Introduction

The rise of platforms such as Uber, AirBnB, Amazon Mechanical Turk, Deliveroo, Fiverr, and ZipCar has triggered increasing academic attention within the past decade. These novel forms of internet-based exchange are subsumed under the term of sharing economy, ‘collaborative consumption’, ‘access-based-consumption,’ or ‘peer-to-peer economy’ (Sutherland & Jarrahi, 2018). These umbrella terms address diverse exchange activities based on similar technological infrastructures ranging from non-commercial peer-to-peer-lending, reselling and trading, and crowdfunding to the provision of on-demand services such as cleaning, food delivery, and transportation services by commercial platform providers.

This paper focusses on a specific part of the sharing economy providing individuals with work opportunities circumscribed as ‘gig work’, ‘on-demand labour’, crowdsourcing’ and ‘micro-tasking’ mediated by for-profit platforms. Current opportunities for this type of platform-based on-demand work (which I hereafter will briefly refer to as ‘platform work’ in the remainder) is available for various service tasks ranging from ridesharing (Uber, Lyft), home-cleaning, and low-skilled micro-tasking (e.g., tagging photos on social media platforms, typing information from a photos, and digitising receipts and invoices) to more complex digital freelance tasks such as programming and design (Frenken & Schor, 2017; Friedman, 2014; Srnicek, 2017). As a common characteristic, the work is allocated by platforms that formally serve as mere intermediates to workers formally classified as freelancer who ‘sell’ digital or physical services to be conducted either digitally (digital on-demand work) or physically (local on-demand work) to customers online.

The volume of academic contributions on this mode of on-demand labour has increased significantly since the mid-2010s (Sutherland & Jarrahi, 2018) and covers various disciplines ranging from technology studies, labour law, information systems research, management studies, organisational theory, labour relations scholarship, industrial relations, and sociology of work to regional development studies. Numerous studies discuss the specific technological foundations, process management, and economic impact of platform-based organisation (e.g. Andersson Schwarz, 2017; Cohen & Kietzmann, 2014; Howcroft & Bergvall-Kåreborn., 2019; Kenney & Zysman, 2015; Langley & Leyshon, 2017; Srnicek, 2016; Sundararajan, 2016). Similarly, the ‘pros and cons’ of platform-based arrangement in terms of their societal impact have moved to the centre stage of scholarly controversies. Platforms’ impact on labour markets and employment (e.g. Meijerink & Keegan, 2019; Rogers, 2015;

Schor, 2017). Critics have voiced concerns that on-demand work will accelerate the erosion of social protections by replacing conventional employment with precarious, contingent work (e.g. Cherry, 2009; Dobusch, 2017; Malin & Chandler, 2017).

These controversies also regard dynamics within the ‘tripartite relationship’ (Collier et al., 2017) of platform organisers, buyers of platform services and platform workers, and the political relations of platforms and other social stakeholders such as unions, competitors, political regulators and communities (Bajwa et al. 2018a). Past research shows that platform operators engage in various strategic activities to pursue their economic interest within and beyond their online-based infrastructures (e.g. Lee et al., 2015; Shapiro, 2017; Donini, 2017; Laamanen et al., 2018; Tassinari & Maccarone, 2017; Wood et al., 2019a, b). Similarly, both workers and external stakeholders have engaged in political activities to tackle social and labour-related issues considered as a result of platform activities (Shapiro, 2017; Donini, 2017; Laamanen et al., 2018; Tassinari & Maccarone, 2017; Wood et al., 2019b). Put together, stakeholder relations in and around on-demand platform settings have proven to be highly politicised. Similarly, political and market power of platforms has been identified as key tension within the emerging sharing economy (Acquier et al., 2017). In line with this, research in the field has acknowledged that “(o)ne of the challenges in understanding the gig economy is identifying (...) the power dynamics between the different (stakeholder) groups” (Bajwa et al., 2018a:9). This points towards the crucial role of socio-political and power-related dynamics in the realm of platform-based work arrangements.

However, systematic analyses of power and power relations are not the key focus in much of existent platform scholarship up to now. Yet some researchers have begun to take a closer look at power asymmetries between the platform operators and those working under it (e.g. Bucher & Fieseler, 2017; Codagnone et al., 2016; Curchod et al., 2019; Gandini, 2019; Graham et al., 2017; Lee et al., 2015; Rosenblat & Stark, 2015; Wood et al., 2019a, b), theoretically informed analyses on power and power related dynamics in current platform scholarship remain comparatively scarce, theoretically fragmented, empirically piecemeal and scattered among various disciplines.

It is therefore startling that links between scholarship on platform work and elaborated bodies of power theory that could provide integrative theoretical foundations of power-related phenomena in platform settings so far only been sparsely outlined. I argue that this could be addressed by a stronger consideration of research from the camp of socio-political scholarship

in Organisation and Management Theory (OMT). This strand of research scrutinising the role of power in business organisations has a long-standing tradition and produced a rich conceptual and empirical insights (for an overview see Becker-Ritterspach et al., 2016; Fleming & Spicer, 2014; Geppert & Dörrenbächer, 2014). However, findings and concepts from this body of research have so far only sporadically found an inroad in platform literature indicating that bridges between both fields have not yet been fully established.

This systematic review is structured based on the core concepts of power from OMT and aims to address this issue by providing the first systematic review of power-related phenomena in relations between platform providers' digital workers and other stakeholders in the on-demand economy. Addressing both platform and power scholars, this work's purpose is twofold: One the one hand it aims to provide a comprehensive overview of power-related issues in platform studies to OMT scholars that could provide starting points to engage in analysis within this field. On the other hand, it provides brief overview of core concepts of power in OMT as well as it provides suggestions how scholars of platform work could use these insights to detail their analysis based on solid conceptual foundations to address current issues in the field such as the lack of theoretical frameworks for the comparative and/or longitudinal analyses of power in heterogenous types of platform arrangements.

This review is structured as follows: In the subsequent *theory section* I briefly introduce core concepts used in research on power in management and organisation based on seminal contributions on 'faces' of systemic and episodic power (Clegg et al., 2006; Becker-Ritterspach et al., 2016; Fleming & Spicer, 2014) which provide a taxonomy to structure this review. Afterward, the methods section provides an overview of the review procedure and brief overview on the body of current platform scholarship assembled during the sampling process. In the *results section* we observe how power is exercised by platforms to affect workers and other stakeholders as well as how workers and other stakeholders attempt to influence or resist platforms' political and power-related activities based on the core themes in platform scholarship derived from the literature analysis. The findings gathered here are subsequently summarised and discussed along the introduced concepts of power theory. Finally, I discuss possible *avenues for further research* from the perspective of platform research and power theory.

‘Faces’ and ‘Sites’ of Power: Towards a Theory-Based Taxonomy for Reviewing Platform Arrangements

The camp of ‘socio-political approaches’ (Dörrenbächer & Geppert, 2014) in OMT investigate political activity as an ‘endemic part of organizational life’ (Fleming Spicer, 2014:237) where power is understood as a generic phenomenon inherent to all coordinated and organised activities (Clegg, 1989; Clegg et al., 2006). It is seen as a relational phenomenon, meaning that certain actors not inherently ‘possess power’ but the power ‘held’ by certain actors is based on the specific, relative distribution of their relative capacity to influence other actors based on different (legitimate or non-legitimate, formal or informal) resources (Clegg, 1989) which are rooted in the socio-normative and socio-technical structures of organisations and their environments such as the specific organisational culture, technologies applied in organisations for process management and workforce control, formal and informal rules, and broader societal norms and discourses .

Episodic and Systemic ‘Faces’ of Power

Power occurs in an ‘episodic’ and ‘systemic’ form (e.g. Allen & Panian, 1982, Burns, 1961, Fleming and Spicer, 2007). Episodic, or agentic power refers to observable, identifiable acts related to the direct exercise of power (e.g. Allen et al., 1979; Buchanan & Badham, 1999; Mintzberg, 1984; Pfeffer, 1981). Episodes of interest-driven, strategic interactions includes two ‘faces of power’ (Fleming and Spicer, 2007, 2014), namely acts of coercion and manipulation. *Coercion* (Fleming & Spicer, 2007) refers to the basic, direct mobilisation of power, e.g. the exercise of formal authority in organisations (Weber, 1947) or activism by social movements to influence firm behaviour (McCarthy & Zald, 1977) where actors utilise available power resources to get others to ‘do something they otherwise would not do’ (Fleming and Spicer, 2014:247 paraphrasing Dahl, 1957; see also Clegg and Hardy, 1996). *Manipulation* refers to more subtle techniques of exercising power such as strategic agenda setting, selective provision of information (Aplin & Hegarty, 1980), strategic sense-making (Clark, 2004; Clark & Geppert, 2011) and impression management (Maitlis, 2004) ‘whereby actors seek to either limit the issues that are discussed or fit issues within (what are perceived to be) acceptable boundaries’ (Fleming & Spicer, 2014:242). Manipulation thus echoes what Luces (2004) called the second ‘face of power’, that is, a kind of power that denotes a certain actor’s ability to prevent decision making or to limit the choices available (Becker-Ritterspach

et al., 2016).

As a second level of analysis, the notion of *systemic power*, reaching beyond these manifest forms of episodic power highlights that power is congealed in social-normative and socio-technical, material structures both at the meso-level of organisations as well as the macro-level of wider institutional contexts (Clegg, 1989; Fleming & Spicer, 2014; Lawrence et al., 2012). Thus, socio-normative and socio-technical structures together create institutionalised, relatively stable, systemic arrangements and standing conditions shaping ongoing episodes of power in given instance (Clegg 1989; Oliveira & Clegg 2015). Even if power is not employed in a given episode, decisions might be influenced by institutional settings, ideologies, and disciplinary technologies (ibid.). Two intertwined forms of this kind of systemic power are highlighted. First, building upon Lukes' 'radical view' of power (2004), *domination* refers to 'attempts to make relations of power appear inevitable and natural' (Fleming & Spicer, 2014:241; similarly Knights & McCabe, 1997), for instance, by articulating ideology (Alvesson 1987), or representing external forces as immutable pressure (Morgan & Sturdy, 2000). Second, *subjectification* refers to the construction of identities, meanings, and membership by seeking to determine an actor's very sense of self, including their emotions and identity (Becker-Ritterspach et al., 2016). In contrast to manipulation and domination

“(h)ere, the focus is not on decision-making or non-decision making, or the ideological suppression of conflict, but the constitution of the very person who makes decisions. According to Foucault, power is achieved through defining the conditions of possibility underlying how we experience ourselves as people. Power, therefore, produces the kind of people we feel we naturally are’ (Fleming & Spicer, 2007:23).

'Sites' of Power

This review also considers that power occurs at different 'sites' or 'locations' in and around organisations and is exercised by different stakeholders in and around on-demand-work settings. On the one hand, existent research highlights various forms of 'power through' and 'power in' organisations (Fleming & Spicer, 2014) where key actors such as platform operators exercise 'power over' different stakeholders. On the other hand, these stakeholders also engage in counteractivities in order to exercise 'power against' organisations such as platforms (ibid.) via individual resistance and collective activism.

Drawing on Fleming and Spicer (2014), the distinction of 'faces' and 'sites' of power provides a two-dimensional taxonomy (see Table 4 below) for the analysis of power in platform work in order to distinguish sites (power 'by' vs. power 'against' platforms) and forms (episodic vs. systemic power) to structure this review.

Table 4. Analytic Taxonomy of Faces and Sites of Power for the Analysis of On-Demand Platforms.

Level of analysis: 'Face' of Power	Power 'by' platforms	Power 'against' platforms
Episodic power:		
<i>Coercion & Manipulation In processes and interaction in and around platform settings</i>	E.g. efforts of platform organizers to induce desired behaviour of on-demand workers in daily work processes by direct mobilization of power, agenda setting, or subtle influence.	E.g. situational resistance and strategic behaviour of on-demand workers in daily activities, stakeholder campaigning against platform policies
Systemic power:		
<i>Domination & Subjectification embedded in socio-normative and socio-technical structures of platforms and platform environments</i>	E.g. utilization of discourse and technological devices to inscribe power relations in organizational arrangements to legitimize business models and facilitate fluent operations	E.g. efforts by affected stakeholders to regulate platforms, counter-discourse, establishment of alternative systemic arrangements.

Source: Own compilation based on Becker-Ritterspach et al, 2016, Clegg, 1989, Clegg et al., 2006, Fleming & Spicer, 2014.

Sampling Procedure, Data Analysis, and Overview on Identified Literature

I conduct a concept-centric review focusing on research outcomes (Cooper, 1988; Webster & Watson, 2002) in order to unpack the core themes and phenomena relevant to understand power in platform work settings and provide a theoretically informed discussion of these novel arrangements through the conceptual lens of power theory.

The emerging fields of platform research hitherto lacks a joint terminology (Sutherland & Jarrahi, 2018). Thus, a simple keyword-based database search turned out problematic to identify a representative sample of literature. More general terms such as ‘sharing economy’ or ‘collaborative consumption’ encompass far-distant and heterogenous forms of internet based economic exchange (Acquier et al, 2019) and thus provided too unprecise results. In contrast, narrow terms such as ‘gig economy’, ‘on-demand economy’, ‘crowd work’, and ‘micro-tasking’ provided too narrow and incomplete search outcomes. Moreover, as a young interdisciplinary field, relevant literature is scattered among sources from diverse disciplines, and it was thus a challenge to identify key outlets that could serve as a starting point for a systematic literature search.

To manage these ‘definitional issues’ (Frenken & Schor, 2017) and blurred field boundaries, I followed existing literature (e.g. Levy and Ellis 2006; Webster and Watson 2002) and conducted a staged sampling procedure which began with an explorative database search followed by iterative forward and backward searches. The procedure included 5 *stages* (see Table 5 below for an overview):

First, I compiled an initial start sample (*stage 1*). This sample was derived departing from a database search scanning titles, abstracts and references in Web of Science and Google Scholar. I combined keywords indicating topical relevance such as ‘gig work’, ‘crowd work’ and ‘on-demand-services’ with keywords indicating theoretical importance such as ‘power relations’, ‘power asymmetry’, ‘commodification’, ‘labour conditions’ and ‘resistance’. Following recommendations for such ‘start samples’ (Torraco, 2005; Webster & Watson, 2002; Wohlin, 2014), I included various disciplines apparently relevant to the research objective, seminal journals from these strands of scholarship addressing, and contributions frequently cited in seminal articles. This search procedure led to including 65 journal articles and conference proceedings to capture ‘a broad conception of what is known about the topic’ (Torraco, 2005:359).

Second (*stage 2&3*), a systematic ‘snowballing’ procedure was conducted. Snowballing refers to (a) using the reference list of the starting set of seminal papers to identify additional contributions (stage 2: ‘backward snowballing’) and (b) subsequently analysing where the identified papers themselves have been cited in more recent publications (stage 3: ‘forward snowballing’) (Wohlin, 2014). Accordingly, in the first iteration of backward- and forward-snowballing, 209 additional papers were included. The papers were identified by using the reference lists of all contributions in the start sample to identify further publications indicating possible relevance due to their titles and abstracts (backward snowballing (stage 2): 144 contributions, forward snowballing (stage 3): 65 contributions, in total 209 additional contributions).

Third (*stage 4&5*), this refined sample of 274 papers was analysed by full-text reading to identify further relevant papers which resulted in the inclusion of 23 additional papers in the sample (backward snowballing 2, stage 4). Additionally, 9 papers published after the sampling procedure was finished were included (stage 5). The comparatively low number of 32 additional sources found in stage 4 & 5 indicates that the previous search procedure was appropriate to gather a ‘saturated’ sample of contemporary literature representatively covering core findings in platform scholarship relevant to the study of power in platform work settings.

Table 5. Overview of the Staged Sampling Procedure

Step	Procedure	Result	Selected publications	Total size of sample
Assembling start sample (Stage 1)	Broad search using initial tentative keywords to identify interdisciplinary sample of seminal papers.	65 papers selected	65	65
Snowballing (Stage 2 & 3)	Backward snowballing and forward snowballing based on title, subsequent exclusion of non –relevant papers based on investigation of abstracts and scanning of full texts.	144 papers selected (backward)	209	274
<i>Iteration 1 (forward & backward)</i>		65 papers selected (forward)		
In-depth analysis Stage (4 & 5)	Identification of seminal papers not yet included in sample based on full-text read and references and subsequent 2 nd iteration of backward snowballing.	23 papers selected (backward 2)	32	306
<i>Iteration 2 (backward), inclusion of papers published after sampling</i>	Additional inclusion of papers published after systematic sampling procedure.	9 papers selected (published after sampling)		

Source: Own compilation.

Following recommendations by Bandara et al. (2011), the final sample of 306 papers (see appendix) was subsequently analysed using the QDA-software Atlas.ti. For data analysis an approach combining thematic coding as well as theory-based coding was conducted: *First*, following recommendations by Wolfswinkel et al. (2013) and based on a grounded-theory-inspired procedure, thematic coding was used to identify the core issues in research. *Second*, this core issues were systematised by applying theory-based coding, that is, a coding scheme including theoretical concepts derived from seminal contributions on power in management and organisational theory (e.g., Becker-Ritterspach et al., 2016; Fleming & Spicer, 2014; see Table 4 above) according to the taxonomy of ‘sites’ and ‘faces’ of power presented above. The results of this analysis provide content and structure the subsequent findings section. After a descriptive overview of the full sample of publications core research themes that transpired from the inductive coding procedure are related to issues and conceptualisations of contemporary power theory based on the previously presented framework.

The full sample includes various contributions dealing with the *heterogenous forms of platform work* in general (e.g. Acquier et al., 2019; Blaschke & Brosius, 2018; Cohen & Kietzmann, 2014; Constantiou et al., 2016; Puschmann & Alt, 2016; Schor, 2018), digital gig work crowd-work and micro-tasking (e.g. Bederson & Quinn, 2011; Berg, 2015; Bergvall-Kåreborn & Howcroft, 2014; Cherry, 2009; De Groen & Maselli, 2016; Deng et al., 2016; Bergvall-Kåreborn & Howcroft, 2014; Cherry, 2009; Deng et al., 2016; Donini et al., 2017; Felstiner, 2011; Kingsley et al., 2014; Raval & Dourish, 2016) as well as forms of local gig work that require local execution such as on-demand transportation, house-cleaning, and food delivery (e.g. Chen et al., 2015; De Groen et al., 2016; Esbenshade & Shifrin, 2018; Rosenblat & Stark, 2015; Wentrup et al., 2019). Not surprisingly, the bulk of studies focusses on the U.S-context. However, researchers have also scrutinised other national contexts such as sub-Saharan Africa (e.g. Graham et al., 2017), India (e.g. Bregiannis et al., 2017; D’Cruz & Noronha, 2018), Great Britain (e.g. Adam, 2017), Germany (e.g. Ivanova et al., 2018) and the spatial fragmentation and delocalisation of digital work across countries in certain settings are emphasised as well (e.g. Heeks, 2017; Lehdonvirta et al., 2019; Vandaele, 2018).

Similarly, the sample covers a range of *academic disciplines and field-specific outlets* (see Appendix) mirroring the interdisciplinary character of the field and several strands of research have proven particularly relevant to the investigation of power in the platform economy in the analysis.

In addition to contributions from information systems research and operations management addressing technical issues of platform organisation, for instance, how technological innovations can increase platforms efficiently, how matching problems can be addressed, and ratings systems be improved (e.g., Dellarocas, 2000; Mohlmann & Zalmanson, 2017). various contributions focus on the social implications of commercial platform organisation:

A substantial share of publications from the field of law studies focusses on labour issues related to employee classification (e.g. Ahsan, 2018; Aloisi & Gramano, 2019; Carboni, 2016; Collier et al. 2018; Coyle, 2017; De Bruyne, 2017; Dubal 2017a, b, c; De Stefano, 2015; Prassl & Risak, 2015; Sprague, 2015) and, based on this, discuss the possibilities and challenges of regulating platform-mediated labour (e.g. Collier et al., 2018; De Stefano, 2015; Edelman & Garadin 2015; Eichhorst et al., 2017; Frenken & Schor, 2017; Means & Seiner, 2015).

Related to this, scholars of industrial relations and sociology of labour have strongly emphasised on issues regarding worker representation (e.g. Allen-Robertson, 2017; Birgillito & Birgillito, 2018; Drahokoupil & Piasna, 2017, 2019; Fabo et al., 2017; Minter, 2017; Newlands et al., 2018; Tassinari & Maccarrone, 2017) , and issues of commodification (e.g. Aloisi, 2015; Dobusch, 2019; Dolata, 2019; Friedman, 2014; Ljungholm, 2019; Malin & Chandler, 2016; Wood et al., 2019a, b).

Similarly, a range of studies in sociological technology studies and technology forecasting have discussed issues such as digital governance (e.g. Ettlinger, 2018; Gaikwad et al., 2015) and platform surveillance (e.g. Anderson, 2016; Kirven, 2018; Van Dijck, 2014; West, 2019). Finally, critical scholarship from gender studies, business ethics and critical sociology have addressed issues of racial and gender discrimination (e.g. Edelman et al., 2017; Piasna & Drahokoupil, 2017; Rosenblat et al., 2017) and unfairness of platforms (e.g. Ahsan, 2018; Fieseler et al., 2017; Risak & Warter, 2015; Sannon & Cosley, 2019).

In terms of *theoretical integration*, platform research is characterised as being in a ‘transitory stage between description and explanation’ (Netter et al., 2019:226) with a significant share of publications providing dense descriptions of platform activities without specifying explicit theoretical foundations. However, particularly newer publications have begun to establish links with existing strands of theory in various academic fields more systematically. Three recent developments are worth noting regarding the study of power. First, scholars have begun to scrutinise public and political debates on the platform economy through the lens of

discursive approaches (e.g. Anderson 2016; Cockayne 2016; Codagnone et al., 2018; Culpepper & Thelen, 2018; Fleming, 2017). Second, the relation between different stakeholders has begun to capture the attention of scholars from stakeholder and governance theory (e.g. Ahsan, 2018; Dreyer et al., 2017; Li et al., 2018). Third, recent papers provide valuable insights into platform workers labour conditions, room for agency, and the power distribution in and around platforms through the lens of labour process theory (e.g. Gandini, 2018; Wood et al., 2019; Veen et al., 2019). The findings of these studies are discussed in greater detail below.

In terms of its *topical focus*, debates within the analysed body of literature can be grouped into three core themes: First and foremost, concerning the fundamental *mechanisms* in terms of the ‘how & why’ of platform organisation in terms of its technological foundations, business model and organisational procedures in this type of organisational arrangements are reflected in various studies in the sample. *Second*, the *consequences* of emerging platform models in terms of their impact on work processes and labour conditions, branches, sectors and societies are at the centre stage in various contributions. *Third*, scholars have documented and discussed the various *reactions of affected stakeholders*, for instance in terms of workers behaviour to adopt to the new forms of work arrangements, societal discourses triggered by emerging platforms, as well as measures of regulation and both individual and collective resistance considering platform activities.

These core themes dovetail nicely with the differentiation of ‘sites’ and ‘faces’ of power established above. The fundamental mechanisms of platform organisation in terms of its technological foundations, business model and organisational procedures provide dense insights how power is exercised ‘by’ platforms based on systemic structures and episodic activities as well as the findings on the consequences of platform organisation can be conceptualised as outcomes of platform power on affected stakeholders. Similarly, the reactions of effected stakeholders, for instance in terms of workers behaviour to adopt and resist in light of these novel platform work arrangements can be analysed as political activities geared towards exercising power ‘against’ platforms based on episodic action and systemic structures. I will thus discuss these core findings along the concepts of ‘sites’ and ‘faces’ of systemic and episodic power in the subsequent results section.

Results: ‘Faces’ & ‘Sites’ of Power in Platform-Based On-Demand Settings*Power ‘by’ Platforms – Mechanisms and Consequences of Platform-Based Organisation*

Studying power by platforms requires explaining the ‘how and why’ of platform organisation in terms of its technological foundations and workforce management approach reflected in various contributions (e.g. Andersson Schwarz, 2017; Cohen & Kietzmann, 2014; Howcroft & Bergvall-Kåreborn, 2019; Kenney & Zysman, 2015; Langley & Leyshon, 2017; Srnicek, 2016; Sundararajan, 2016). Research highlights that platform work in recent manifestations is not a genuinely new phenomenon but features similarities with historical, non-digital contingent work arrangements that can be traced back to past work arrangements such as industrial piecework (Lehondovita 2018) and classic forms of medallion cab industry (Dubal, 2017b). However current technology allows to organising various tasks according to a similar logic in a more sophisticated way. Mobile devices and web applications allow for novel forms of algorithm-based demand and supply coordination as well as monitoring task fulfilments, thus allowing cheaper and more efficient control and surveillance of such work processes. Compared to its historical forerunners, platform work thus is seen as more effective and allows to scale, centralise and bundle activities more easily. Consequently, platform work becomes increasingly employed in fields where contingent work has a long-standing tradition, such as the medallion cab industry, as well as it spreads to novel fields and industries such as restaurant food and consumer good delivery, design tasks, administrative support services, cleaning services formerly organised based on conventional models of employment and organisation (e.g. Dubal, 2017a, b; Lehondovita, 2018; Thelen, 2018).

Following Sutherland & Jarrahi (2018), addressing the ‘how’ of platform organisation, platforms face *specific affordances* to ensure fluent, productive operations and induce desired behaviour of platform users to create and capture value. Generally, they emerge in fields where platform work allows to *extent reach*, meaning that platform increase users’ ability access to resources and services in terms of scale, distance, and heterogeneity of resources. To do this, ‘generating flexibility’ is crucial. This implies that platforms need to coordinate short-term demand and supply simultaneously under volatile conditions on both sides of the exchange process (Kirchner & Schüßler, 2018) on-demand and with minimum friction. This requires mechanisms ensuring ‘efficient match-making’ to safeguard timely provision of services with sufficient quality. Because a core competitive advantage of platforms regards their ability to provide comfortable, just-in-time access to services, providers need to embed appropriate,

cost efficient, trustworthy, and easy-to-use ‘transactions and payment systems’. Moreover, it is important to shape interactions between buyers and sellers in ways that ensure a sufficient degree of mutual *trust between buyers and sellers*, as well as platforms themselves need to appear sufficiently trustworthy to potential users. In addition, commercial platforms in particular rely on constant growth in order to ‘extend scale and scope’. Many start-ups in the field are far from profitable. However, the declared objective of many for-profit platform ventures is to achieve a size, coverage, and a dominant market position. This logic originated from the emergence of role-model tech firms such as Google and Facebook. The success of these companies has created an ‘investor narrative’ in the Silicon Valley venture capital economy based on the believe in so-called blitz-scaling, a growth strategy which focusses on rapid market entries and company growth to ultimately achieve a dominant market position (e.g. Acquier et al., 2019; Wentrup et al., 2019). The underlying rationale is that, in contrast to other businesses, platform-based tech companies can harness a quasi-monopolist position after successful growth beyond a certain threshold due to network effects, a phenomenon probably best exemplified by Facebook’s dominant position as social network platform (e.g. Dolata, 2017, 2019) or Amazons’ market dominance in E-commerce (Culpepper & Thelen, 2019). Following this logic, many on-demand platforms strive to achieve positions in their specific fields of activity. Even if recent problems regarding Uber at the stock markets (e.g. Desai, 2019; Finkenzeller, 2019) demonstrate that the ‘Silicon Valley mantra’ of blitz-scaling has begun to become questioned by shareholders and venture capital, this approach continues to fuel platform’s overall business strategies (e.g. Acquier et al. 2019, Wentrup et al. 2019)⁸.

⁸ Interestingly, recent media coverage regarding, for example, Uber indicates that some platform companies face significant challenges in course of their initial public offering (IPO) or stock market launch (e.g. Isaac, 2019). Uber, formerly financed by venture capital firms and informal ‘angel’ investors, faced substantial devaluation in the course of its stock market entry. This might indicate that while venture capitalists seem less concerned with current profitability and keen to invest based on convincing visions of platform start-ups, numbers and performance metrics become more important once these companies enter public markets. That shift often requires them to engage in more detailed reporting, and these firms thus increasingly become the subject of critical public investigations by stock market analysts. In the context of platform research, these challenges accompanying changing ownership structures have not yet been studied systematically. Hence, future investigations of platform IPOs through the lens of, for example, shareholder and investor relations scholarship would address a research gap. Such investigations could also scrutinise the rhetorical manoeuvres and public relations strategies of platform managers during IPOs, for example, by drawing on discursive approaches in OMT (e.g. Vaara & Tienari, 2011) and former contributions on rhetoric managerial ‘Tools of legitimacy’ (e.g. Barros, 2010).

To meet these strategic objectives, most platforms share the basic mechanisms of web-based coordination of demand and supply, rating and monitoring technology which allow for a specific management technique which has been subsumed under the label '*algorithmic management*'. Various studies (e.g. Allen-Robertson, 2017; Bergvall-Kåreborn & Howcroft, 2014; Dreyer et al., 2017; Kirchner & Schübler, 2018; Rosenblat & Stark, 2015; Wood et al., 2019a) focus on different elements of this approach. First, platforms inscribe rules and the sequence of processes in their algorithmic structures, a management technique which has been described as *algorithmic bureaucracy* (Kirchner & Schübler, 2018). This includes rights and duties of participants in form of terms and conditions and click wrap agreements 'binding guidelines that, taken together, define the rules of the game. They are used to disclaim warranties, restrict liability, indicate the applicable law, and determine mechanisms for dispute resolution' (Aloisi, 2015:671). Additionally, processes are inscribed in the digital infrastructure determining digital work processes sequences (Kirchner & Schübler, 2018). These process patterns mirrored in the software worker-faced and customer-faced user interfaces thereby become obligatory 'performative performance programmes (ibid.) 'whereby the designer(s) (platform owner) codify(y) programs of action that are inscribed into the algorithm and that drive transactions among buyers, sellers, and the platform owner' (Curchod, 2019:24). In addition, *user evaluation systems* where service providers can be rated by customers present a core mechanism of algorithmic management. It is noted that

'(w)hile similar systems exist in traditional industries (e.g. the star rating for hotels), by definition, the potential information and information processing power, as well as the ease and potential pace of change, are significantly greater among technology enabled [platform, DP] business models' (Dreyer, 2017:89).

Besides the inscription of such bureaucratic principles and evaluation systems, algorithmic management includes *additional influence mechanisms*. Platforms need to 'encourage users' to attract both buyers and sellers to the platform in order to create and capture value (Laamanen et al., 2016:214). Research has highlighted various mechanisms to do so. They include software-based nudges and elements of gamification used to align desired user behaviour with non-cash, psychological rewards (Calo & Rosenblat, 2017; Cherry, 2012; Leismester & Blohm, 2013; Schmidt, 2016; Yang et al., 2018), rhetoric invocations such as inspirational appeals to users via pop-ups and other forms of app-based communication (Scheiber, 2017) and economic incentives and surges based on platform interference such as

temporary increase of pay rates in case of undersupply in settings and situations where prompt supply of service is needed (Rosenblat, 2018). Research emphasises that most of these mechanisms crucially *rely on data*. The software infrastructure of platforms allows tracking tightly monitor operations and simultaneously generate data on user behaviour. Similarly, evaluation systems provide data on service quality. This data can be used to refine operational strategies, control mechanisms and measures taken to enact algorithm-based influence. This specific approach of algorithmic management also highlights that the elements of platform management task differs those known from conventional settings⁹.

This assemblage of influence mechanisms is relevant in light of *platforms' specific labour organisation*. Most platforms business models are built upon contingent work with platform workers formally representing freelance subcontractors or 'business partners' of the platform. In the absence of conventional employment relations and conventional mechanisms of organisational coordination such as direct supervision and formal authority the different elements of algorithmic management serve as functional equivalent to steer operation, match demand and supply and safeguard efficient operations (e.g. Kirchner & Schüßler, 2018). This freelance subcontracting approach is also related to platform profitability. It allows platforms to bypass various obligations such as minimum wages, protective labour regulation, and allows them to avoid fixed costs that come along with conventional employment (e.g. Friedman, 2014; Means & Seiner, 2015). Thus, this freelancing approach is seen as an important building block of on-demand service platforms' competitive advantage.

⁹ The genuine business model of platforms thereby also seems to influence the fundamental tasks for managers in these settings. Yet, the situation of managers and managerial work have rarely been addressed explicitly in current platform scholarship and could therefore be addressed in future research. However, some initial insights can be derived from existing contributions on algorithmic management procedures (e.g. Cohen & Kietzmann, 2014; Duggan et al., 2019, Kirchner & Schüßler, 2018; Rosenblat & Stark 2016; Whiting et al., 2017). Platforms' technology-based management techniques have largely replaced traditional lower-level management tasks such as supervision, motivation, direct feedback, and guidance with algorithmic mechanisms. Regarding traditional middle-management the focus seems to have shifted away from tasks such as team- and group-level performance monitoring and team conflict resolution towards tasks related to the establishment and continuous refinement of algorithmic infrastructures and information systems. Similarly, to conventional company settings, the top-level platform management remains responsible for the public representation of the company and sets the overall corporate agenda (e.g. decisions on public relations, market entry, and scaling strategies). However, traditional management tasks related to coordinating employees seems to have become less important due to algorithmic management structures while IT-related strategy development concerning the 'digital core' of platforms has become more important for C-suite platform managers than for managers at companies in more traditional industries.

The approach of algorithmic management can be viewed as a core mechanism relevant to understand how power is exercised by platforms based on systemic infrastructure. With organising work processes almost entirely based technology ‘management becomes automated, algorithms become employers, information asymmetries grow, and pre-existing power imbalances are exacerbated’ (Gearhart 2017:13, similar Heeks, 2017). Thus, the elements of algorithmic management require a closer examination regarding their episodic and systemic power implications. The basic setup of algorithm-based bureaucratic mechanisms fixes the basal patterns of roles and social relations of workers consumers and platform providers. Similarly, the establishment of *semi-automated rating and matching systems* represent an important evaluative and disciplinary tool for systemic platform power since poor ratings endanger a worker’s online credibility, impact their future job prospects, or can result in their removal from the platform entirely (Codagnone et al., 2018; De Stefano, 2015).

Moreover, systemic power stems from the technological infrastructure of platforms that allows for almost encompassing surveillance of platform users based on data (e.g. Bajwa et al. 2018a:24, Kirchner & Schüßler, 2018; Rosenblat & Stark, 2015). The power-related effects of data-access have been emphasised departing from the concept of *dataveillance* first proposed by Clarke (1988). The concept has been applied to the common practices of platforms to continuously monitor and collect (online) data and users’ communications and actions (van Dijck, 2014). Drawing on Foucault (1977, 1980), it has been argued that dataveillance providing access to a plethora of data’ (Kirchner & Schüßler, 2018) allows platforms to exercise ‘quasi-panoptic power’ (Kirchner & Schüßler, 2018) based on asymmetrical access to information (e.g. Bajwa et al., 2018a, b; Horton & Tambe, 2015). Like Facebook and other tech companies, platforms harness this capacity of ‘panopticon monitoring’ (Aloisi, 2019; Anderson, 2016; Curchod et al., 2019; Doellgast, 2018; Gandini, 2019) to enhance operational efficiency based on big-data analytics applied to continuously improve algorithm-based management regarding e.g. app-based match-making, incentive mechanisms, and nudges (Rosenblat & Stark, 2016).

In light of these diverse mechanism utilised by platform operators to influence platform workers, researchers in the field (e.g. Belk, 2014; Cockayne, 2016; Cherry, 2018; Codagnone et al. 2016) acknowledge that – contrary to the common self-portrayal by platforms as mere market intermediaries connecting freelance business-partners and consumers for ‘free

economic exchange’ – many platforms establish socio-technical structures allowing them to exercise power over workers to a remarkable degree based on specific mechanisms that replace mechanisms known from conventional work arrangements. Based on their investigation of ridesharing platforms, Codagnone et al. (2016) have expressed this aspect vividly by emphasising that this

‘ensemble of surveillance instruments (.) substitute(s) direct managerial control and create(s) power asymmetries between the platform and the drivers. The pillars of this system are: assignment algorithms, surge price algorithms, and semi-automated evaluation (i.e. drivers’ acceptance rate plus the ratings received by the passengers). These match three aspects typical of human resources management: work allocation (i.e. passenger assignment, plus predictive scheduling), information (dynamic surge pricing), and evaluation (semi-automated evaluation)’ (ibid.:38)

From a socio-political angle, algorithmic management practices thus refer to the key elements of systemic power described by socio-political scholar (e.g. Clegg, 1989; Fleming & Spicer 2007). On the one hand, algorithmic management inscribes mechanisms of dispositional power to platforms organisational structures which imposes rules of meaning, membership, and ‘the necessity to accept these regulations impose(ing) the rationalism of norms, classifications, and rankings’ (Curchod et al, 2019:23) on platform workers and customers. On the other hand, this form of systemic integration serves to steer processes in platform organisation thereby exercising ‘facilitative power’ (Clegg, 1989) based on available technologies of production and discipline.

This socio-technical, systemic setup determines power relations in platform arrangements with several important *consequences concerning processes and dynamics of episodic power*. First and foremost, the design of systemic platform structures determines *actor relations* which leads to a specific power imbalance. Curchod et al. (2019), for instance, note that these

‘programs of action empower some groups of actors by granting them more rights (buyers can evaluate sellers), disempower some others by granting them fewer rights (sellers cannot reciprocate with negative evaluations), and set procedures that regulate interactions on the platform (by imposing evaluation criteria on buyers or downgrading sellers with low scores).’ (ibid.:24)

In this context, it is important to note that placing customers in a more powerful position than workers serves the fundamental platform objective to maintain fluent operations and efficient worker control. By outsourcing such tasks of direct supervision to customers which are positioned ‘as agents in the management circuit’, (Wood et. al., 2018:7, similarly e.g. Aloisi,

2015; Anderson, 2016; Fieseler et al., 2017; Gandini, 2019). Due to platforms' technological foundations and genuine business models, platform operators strongly rely this form of coalition building with customers (Curchod et al., 2019). In this sense platforms exercise no coercive power on workers in a conventional manner. Instead, in extension of 'customer management' strategies (Fuller & Smith, 1991) online customer evaluations create a new form of employee monitoring (Curchod, 2019; Wood et al., 2019a, b) where customers serve as middle managers exercise coercive power based on a 'ensemble of surveillance instruments which substitute(s) direct managerial control' (Codagnone et al., 2016:38). Thus, 'coalitions of interests and reliance on automatic procedures allow the platform owner to exert power over a large population of individuals at the lowest possible cost' (Curchod et al., 2019:23).

Furthermore, platforms' socio-technical setups create *information asymmetry* between different actors which favour platform providers. Based on platforms access to information and exclusive control over information channels, platform workers 'live in a space of digital surveillance' where 'data is asymmetrically used to exercise power' (Bajwa et al. 2018a:24, similarly e.g. Kirchner & Schüßler, 2018; Rosenblat & Stark, 2015). For instance, sources report that transportation and delivery service platforms withhold delivery addresses or rider destinations from workers when orders are offered, thereby ensuring that these 'gigs' are accepted even when uneconomical for workers, for instance, when these orders would lead drivers to remote, low-demand areas (e.g. Anderson, 2016; Rosenblat & Stark, 2015; Veen et al. 2019). This 'obfuscated nature' of platform systems 'limits workers' understanding of (...) bureaucratic controls, [thus] acting as another control lever and eliciting compliance with the work rules' (Veen et al., 2019:14). This practice is found to constrain workers' choices, curtail their ability to make informed decisions, and express agency (Ibid.).

Beyond withholding information, *platforms' information-based politicking* also includes the provision of selective information and the use of information channel control to engage in discursive manoeuvres geared towards influencing workers via company rhetoric based on email alerts, pop-ups and push notifications. As Cockayne (2016) emphasises referring to such rhetoric invocations focused on motivating workers to act according to the platform's requirements are widespread. Offensive inspirational appeals include push-notifications such as 'Are you sure you want to go offline? Demand is very high in your area. Make more money, don't stop now!' (Rosenblat & Stark, 2016:3768).

Besides these more obvious efforts of rhetoric encouragement, platform research documents there are more subtle mechanisms geared towards legitimising company practices, framing platform work in a desired way, and influencing worker identities based on the *utilisation of the broader 'sharing economy discourse'* (e.g., Cockayne, 2016; Codagnone et al., 2018; Murillo et al., 2017; Pasquale, 2016; Peticca-Harris et al., 2018; Pinsof, 2015; Ravenelle, 2017; Richardson, 2015; Schor, 2017; Tomasetti, 2016; Van Doorn, 2017; Uzunca & Ozcan, 2018). As highlighted by Belk (2014), yet commercial platforms remain based on traditional models of sales and ownership and thus barely share characteristics of 'true' sharing economy platforms such as casual car pool forums and online volunteering (ibid.), where exchange is characterised by non-reciprocal and pro-social behaviour, platforms are found to put immense effort in reframing themselves as companies operating under the banner of the 'Sharing Economy-manifesto' (e.g. Murillo et al., 2017). They do so by constantly self-portraying themselves as innovative proponents of emancipative, entrepreneurial ventures, and pioneers in changing ancient economic regimes by providing non-commercial opportunities to share underutilised goods and by providing income opportunities for income opportunities for otherwise marginalised worker populations (e.g. ethical minorities) due to low entry barriers (e.g. Rosenblat & Calo, 2017:3). Thus, it is criticised that for-profit on-demand sharing platforms adopt this socially-progressive discursive narrative of 'sharing' to legitimise themselves to societies and regulators, while thereby simultaneously masking the realities of the commodified work they often provide (e.g. Aloisi & Gramano, 2019), a strategy which has consequently been criticised as 'pseudo-sharing' (Belk, 2014) or 'sharewashing' (Bajwa et al., 2018a). Obviously, these manoeuvres can be conceptualised in resemblance to the concept of political sensemaking (e.g. Clark & Geppert, 2011) and 'identity regulation as organizational control' (e.g. Alvesson & Willmott, 2002) where meanings constructed by powerful actors influence the image and identity that stakeholders ascribe to these actors. For platform companies, these strategies seem to be crucial to legitimise the core of their business model and thereby immunise against fundamental threats, for instance, legislation classifying platform workers as employees which would severely limit platform profitability or endanger their general competitiveness. Consequently, platform scholarships documents strategies of this type geared towards influencing workers, customers and external stakeholder on behalf of the companies' interests.

Concerning workforce relations, for instance, a 2017 Guardian report based on leaked documents from Deliveroo, a platform providing food delivery services, brought to light that the company is ‘creating vocabulary’ to avoid calling couriers employees’ (Butler, 2017). The article unveiled detailed internal advice for middle-managers to ensure proper wording compatible with platforms’ self-portrayal as mere provider of work opportunities for freelancers. The company, for example, refers to Deliveroo couriers as ‘independent suppliers’ rather than employees, workers, or staff, ‘onboarding’ instead of hiring, and ‘availability’ rather than work shifts. Anderson (2016) has conceptualised such rhetoric-based efforts to maintaining this ‘entrepreneurial frame’ as ‘affective framing’ where workers are addressed as “friends with cars, on demand” rather than “cabdrivers” (Anderson, 2016:240) to mask potential exploitation, commodification, and new forms of inequality as well as the polarisation of power and ownership in the digital economy (similar e.g. Ahsan, 2018; Robertson 2016). Such ‘language games’ (Alvesson et al., 2008; Clegg et al., 2006; Wittgenstein, 1953,) are seen as geared towards ‘cultivating holding environments for precarious and personalized work identities’ (Petriglieri et al 2019:1) supporting the discursive normalisation of flexible labour (Cockayne 2016:80). Through the lens of power theory, these efforts can be conceptualised as subjectification where organisations engage in identity work (Hardy & Phillips, 1999; Suddaby & Greenwood, 2005) and strategic sense-giving (e.g., Berente et al., 2011; Rouleau & Balogun, 2011).

Beyond exercising this ‘subjectivating’ influence on workers, meaning the purposeful corporate manoeuvres to construction of identities, meanings and membership to determine an actor’s sense of self, emotions and identity (Becker-Ritterspach et al., 2016; Fleming & Spicer, 2014) *platform rhetoric can also support platforms coalition building with customers*. For instance, Culpepper and Thelen (2019) argue that platforms’ ability to communicate to consumers facilitates a software-based impression management, which transports the positive ideology of sharing to customers. Thereby, platforms seek to establish a ‘permissive consensus’ (Hooghe & Marks, 2009) with user which are ‘primed’ (Culpepper and Thelen, 2019) as customers by these invocations - tend to tolerate platforms’ conduct because they benefit from free lunch delivery, lower costs, and easy access to goods and services.

Technology-mediated rhetoric influence on users also relates platforms efforts to safeguard their political and legal interests by *influencing external stakeholders*. Representatives of platform operators, like other company representatives, engage in lobbying and forum-shopping. However, recent research (e.g. Culpepper & Thelen 2019) emphasises that platforms sometimes have reason to favour incorporating the public since legislators are likely to react according to the public opinion. The authors provide an interesting example on this type of platform-based political campaigning where political mobilisation is bolstered by app-based communication infrastructure:

‘In the United States, Uber was able to frame the conflict on terms favourable to itself, portraying its own role as promoting innovation and consumer choice against inefficient, rent-seeking local taxi monopolies. Uber also pioneered and perfected the strategy of using its app to mobilize consumers and apply pressure on politicians through social media campaigns. Indeed, Uber in 2017 included in its terms and conditions the following language: “Uber may also use the information [we collect] to inform you about elections, ballots, referenda and other political and policy processes that relate to our services.” When faced with the prospect of unwelcome regulation, the company often responded by adding a tab to its app through which users could register their disapproval to the city government with the push of a button— so much easier than writing a letter or marching on city hall! (Thelen, 2018, p. 7). As Collier et al. (2018) emphasize, Uber was thereby able to channel the way in which the preferences of “the public” were presented, “solving” consumers’ collective action problems while also controlling the message’ (Culpepper & Thelen, 2019:18)

As these findings illustrate, platform operators possess a powerful position within the socio-political nexus of platform stakeholder relations. Hence, representing the key actors in shaping emerging platform economy, platform companies have used this capability to disrupt various economic fields. The resulting spread of platform-based business models in numerous industries has come along with significant *consequences for work and employment* which are vividly discussed within platform scholarship (e.g. Glöss et al., 2016; Mair & Reischauer, 2017; Rogers, 2015; Schor, 2017). Yet research has pointed to the heterogeneity of platform-based arrangements in terms of their specific approaches of human resource management (Duggan et al., 2019; Howcroft & Bergvall-Kåreborn, 2019) and the labour conditions they offer (also pointing towards some more ‘enlightening’ examples, see e.g. Kalleberg & Dunn, 2009) a range of specific issues and problematic dynamics seem to be widespread in the emerging gig economy. Hence, many platforms have been criticised for generating ‘efficiency through commodification’ (Fieseler et al., 2017:2) and using gaps in existent labour

regulations engaging in novel forms of human resource and workforce management that come along with significant social costs (Rogers, 2015).

Regarding the *individual labour conditions* of platform workers, it is widely acknowledged that this mode of labour organisation often yields income insecurity and low average hourly earnings for workers (De Groen & Maselli, 2016a, b). This issue gains even more relevance because a significant share of platform workers economically depends on platform work as sole source of income due to lacking employment alternatives (Manyika et al., 2016, Schor, 2017). The dependence on platform work, combined with the constant exposure to customer evaluation and the necessity to maintain favourable ‘platform reputation’ (e.g. Mikołajewska-Zajac, 2018; Sutherland, & Jarrahi, 2018; Wood et al., 2019b) has been found to induce high levels of psychological stress (Bajwa et al., 2018a). Similarly, the app-based approach of work hampers social interactions among platform workers and, consequently, induces serious psychosocial issues such as the feeling of isolation and alienation (ibid.; Marmot, 2015; Turkle, 2017).

Research also highlights problematic outcomes *beyond these issues at the individual level*. It is emphasised that the increasing competition between platforms and traditional business leads to the transformation of *branches and sectoral labour markets* (e.g. De Groen & Maselli, 2016; Duggan et al., 2019; Meijerink & Keegan, 2019). Possible labour market effects are, for instance, the transformation of regular lower-qualified occupations into contingent platform-based freelance work (e.g. Davis, 2015; Schor, 2017). Scholars have thus raised concerns that the spread of platform-based organisation – particularly in fields where single platforms might achieve market dominance – might lead to sector-wide workforce commodification (e.g. Aloisi, 2015) by creating a new digital ‘cypertariat’ (Huws, 2009) and ‘reinforc(ing) post-capitalist hyper-exploitation’ (Peticca-Harris et al. 2018:1).

Against this background, research has highlighted various *obstacles for individual and collective resistance* geared towards taming the sometimes-problematic consequences of platform-based work organisation. Next to barriers to individual and collective resistance related to the technology-based configuration of in-app systemic structures outlined above, gaps in legislations prevent platform workers to mobilise formal rights and to access to ‘robust tool kits’ of labour and industrial relations regulation that would enable bargaining and safeguarding their interests (Williams & Geppert, 2011). Moreover, research also highlighted that commodification hinders resistance in some gig work settings (e.g. Rosenblat & Stark,

2015). In addition, research has emphasised that the ‘atomization’ of workers in platform arrangements (e.g. Bergvall-Kåreborn & Howcroft, 2014; Collier et al., 2018; Graham et al., 2017; Huws, 2014) and the socio-demographic, ethnic, and socio-economic heterogeneity of platform workers curtails their possibility to communicate with each other and hinders the emergence of shared ‘worker identities’ (e.g. Petriglieri et al., 2019). This issue combined with the fact that platform workers are formally not associated with pro-labour political institutions such as union also curtails platform workers ability to engage political lobbying. However, despite these obstacles, affected stakeholders have not remained idle but have engaged in various efforts to safeguard their interests in response to platform business policies which I will describe in greater detail in the subsequent section.

Power ‘Against’ Platforms – Stakeholder Reactions to Platform Business Policies

Despite the difficulties to engage in both individual and collective actions to tackle issues related to the rise of the sharing economy, the scholars have documented various efforts by different stakeholder to establish counter-power in order to safeguard their interests in response to platform business policies.

A first group of political activities documented in platform scholarship relates to *efforts to overcome deficits in communication, identity building, and solidarisation*. As Laamanen et al. (2018) emphasise, these efforts are vital to organise platform resistance while simultaneously pointing towards possible solutions for this problem:

‘We assume that common identification can enable representation and more radical politics. There are different affordances to how actors build reciprocities, solidarities and joint structures, which we discuss in terms of discrete mobilizations, traditional labour organising, shared governance and common ownership. These affordances may explain why resistance does not seem to be sustainable or leading to enduring change in the collaborative economy context’ (Laamanen et al., 2018:18)

Next, in the context of worker solidarisation past research highlighted that individual strategies to improve individual economic outcomes of platform engagement appear to be curtailed by existing information asymmetries. For instance, taking the example of Uber Allen-Robertson (2017) emphasises that “(d)river frequently speculate on the rules and factors involved in the distribution of fares, fare pricing, and the construction and influence of driver ratings on these systems.” (Allen-Robertson 2017:3) since the underlying mechanisms and algorithms are not make transparent by platforms. Thus, “engage(ment) in ‘rule discovery’” (ibid.) has been described as major challenge for platform workers’ as the awareness of the mechanisms steering their daily activities is a precondition for strategic individual behaviour geared towards safeguarding their interests.

However, despite of these challenges, research has pointed to a range of activities geared towards improving platform workers position based on *individual coping strategies*. For instance, to decrease their exposure to digital surveillance it has found that workers engage in ‘self-protective behaviour’ (Sannon & Cosley, 2019). Taking the example of platform workers on Amazons’ ‘Mechanical Turk’ they found that

‘Turkers’ decisions to provide personal information during tasks were based on evaluations of the pay rate, the requester, the purpose, and the perceived sensitivity of the request. Participants also engaged in multiple privacy-protective behaviors, such as abandoning tasks or providing inaccurate data, though there were costs associated with these behaviors’ (ibid.:1).

Additionally, Individual platform workers attempt to enhance their individual bargaining power vis-à-vis platforms and customers by using evaluation systems for quality signalling. For instance, research by Durwald et al. (2016) shows

‘that quality signals of crowdworkers increase the bargaining power towards their principals, i.e. the crowdsourcers. As a result, the crowdworkers can reach a turning point of critical bargaining power at which the distribution of power shifts in their favor. We contribute to the literature by unravelling signalling behavior as mechanism influencing bargaining power and thus success in crowdsourcing’ (ibid.:1).

Furthermore, platform workers can exploit the low entry and exit barriers of platforms to engage on various platforms (for instance, in the Chinese ride-sharing market about ten percent of taxi drivers reported to have registered on more than two platforms [Chen, 2018]). In resemblance to long-standing debates on workers’ ‘exit options’ (Hirschman 1970), workers thus hold a certain ‘*mobility power*’, which implies the ‘ability to utilise one’s weak attachment to a certain work place in order to exit ‘bad’ jobs and escape degrading terms and conditions (Manolchev 2019:10). However, mobility power is limited in some cases, such as in when workers are heavily dependent on a certain platform, for example, due to lacking employment alternatives or the necessity to remain high ratings on a certain platform to assure continuous task assignments (e.g. Rosenblat & Stark, 2015, Schor, 2017).

Beyond these strategies of worker resistance well-known from scholarship on labour in conventional business organisations, platform workers also use more subtle ways of resistance in their daily activities. Interesting observations has been made concerning app-specific worker strategies to cope with the mechanisms of algorithmic control in their daily activities. Research has pointed towards different forms of reflexive behaviour and ‘workarounds’ (e.g. Lee et al., 2015) whereby workers try to understand the algorithmic ‘black boxes’ of platforms and, subsequently, use these knowledge and tacit assumptions about how platform algorithms function to make more informed decisions and thereby resist platform manipulation and safeguard their interests (e.g. Allen-Robertson, 2017; Shapiro, 2017). Similarly, Sannon & Cosley (2019) highlight that workers use strategies of digital impression management, for instance to deal with customer complaints (e.g. Abramova et al., 2016). Lee

et al. (2015) have illustrated this form of workarounds. Among other strategies, Uber drivers engage in efforts to trick the platforms' algorithmic ride-assignment algorithms and get the types of requests and clients they preferred. For instance, drivers limit their work area by turning off the app to avoiding bad neighbourhoods. Similarly, they bypass platform matching algorithms by arranging rides offline (e.g., via phone), asking customers to request a ride in-app once they are in the car to get matched. Furthermore, the understanding of general rules of algorithmic task assignment, for instance, that 'the closest drivers get assigned' helps drivers to strategically influence their work (Lee et al., 2015:4). For instance, drivers, who intent to benefit from hourly payment promotion granted for constant availability, park in between other ridesharing cars in order not to get matched. In line with earlier scholarship highlighting that tacit knowledge can provide a valuable source of episodic power (e.g. Mudambi & Navarra, 2015), recent scholarship has put these insights in line with existing power theory from a more theoretical angle. As noted by Curchod (2019),

'(p)aradoxically, subordinates' knowledge of rules and sanctions enables deviation from the norm, thus creating scope for individual agency. Subordinates express agency under conditions of power asymmetry by leveraging specific skills to bend the established norms to their advantage (Mechanic, 1962; Vallas, 2006), by exploiting zones of uncertainty to control actors with greater power (Crozier and Friedberg, 1979) [...] Thus algorithms restrain sellers' [i.e. workers, DP] agency while at the same time giving them the opportunity to learn from their use' (Curchod et al., 2019:27).

This novel forms of 'technology-based politicking' seem to be significant element of day-to-day micropolitics in the platform economy that undoubtedly deserve further scholarly attention.

In addition to these individual coping strategies, research paid attention to *individual and class action lawsuits* geared toward improving workers' rights and protection (for an overview see e.g. Cherry 2016). Many of these attempts challenge platform worker' classification as independent subcontractors in order to 'bring gig and platform workers under the umbrella of existing statutes governing the employment relationship' (Johnston & Land-Kazlauskas, 2018:5). More specific legal proceedings, in turn, are aimed towards specific platform policies such as the issue of unilateral reduction of fare rates in ridesharing (e.g. Rosenblat & Stark, 2015). Even if such practices are contemporarily covered by platforms' terms and conditions, they disproportionately penalise workers, who committed themselves significantly to the platform. For example, Uber drivers were forced to invested in new cars to

provide decent services. As a result, the drivers' personal business plans became endangered due to lower average incomes (ibid.). Other lawsuits have geared towards granting platform workers the right to transfer their reputation from one platform to another which would increase their bargaining power, lower dependence on certain specific platforms, and thus increase competition between platform providers (e.g. Fabo et al., 2017).

These law suits were initiated from both outside the traditional labour movement (Lane & Daus, 2012) and with union support. Even though platforms formally operate outside the area of union responsibility, trade *unions* have supported platform workers in various ways (Johnston & Land-Kazlauskas, 2018:5). For instance, it is reported that

'(i)n the UK, GMB, the union for professional drivers, was successful in bringing forth, to date, one of the largest cases regarding worker misclassification against Uber. GMB argued that despite Uber's classification of drivers as independent contractors, a more appropriate classification for drivers would be the United Kingdom's 'worker' status. The ruling provided 30,000 drivers across the United Kingdom access to basic employment provisions including holiday pay, minimum wage, and breaks (GMB, 2016)' (Johnston & Land-Kazlauskas, 2018:5).

Aside from challenging platforms at the legal level, unions have also engaged in *public campaigning* in favour of platform workers. For instance, in Germany, several unions have started campaigns to increase the public awareness of platform work related issues and to call for political regulations (e.g. Collier et al., 2018; Vandaele, 2018). These different forms of 'surrogate representation' (Collier et al. 2018) have proven to be important due to the weak initial position of 'atomised' platform workers as 'strike actions or the informal expression of dissent [...] is more likely to take place when there is a union presence (Korczynski, 2014; Rubin, 1986)' (Curchod, 2019:4).

Besides coalition-building with unions, platform workers have also engaged in various efforts towards *self-organised resistance*. Most of this collective worker activism is interestingly based on the same technological foundations used by platforms to create existing patterns of platform organisation. Some of these efforts geared towards 'turning technology to support regulation' (Berg, 2015:3) rely on pre-existing, IT-based online infrastructures such as social media platforms or online forums which are used by drivers to organise communication channels and mutual support (e.g. Lehdonvirta, 2016). For instance, Lyft and Uber drivers share information, for instance, about drunk riders to warn other drivers (Lee et al., 2015). Similarly, as reported by various sources (e.g. Codagnone 2016; Martin et al., 2016) digital

micro-workers have created a dense network (Yin et al, 2016) ‘formed of overlapping forums, websites characterised by public or semi-public discussions’ to ‘share information about lucrative tasks and discuss best practices for dealing with clients (Gray et al., 2016; Lehdonvirta et al., 2018; Martin et al., 2014; Wood et al., 2019)’ (Codagnone, 2016:97).

In addition, this type of self-organised online communication has also been used to coordinate episodic strike actions (e.g. Curchod, 2019:4). The existence dense communication networks for workers also opportunities for *collaborative forms resistance, workarounds and algorithm manipulation*. For instance, workers driving for ride-hailing platforms can collaborate in order to engage in ‘surge pumping’ (Klein, 2019). This is geared towards influencing platforms’ pricing algorithms that are designed to manage a mismatch between supply and demand by temporarily increasing driver fares to attract drivers to work in undersupplied areas (Rosenblat & Stark, 2015). Recent news reports illustrate the functioning of this micropolitical strategy of manipulation:

‘Recently, ABC 7 News out of West Virginia ran a story about Uber and Lyft drivers manipulating the ridesharing apps to create artificial surge pricing. The practice works by a group of drivers agreeing to all turn off their hailing apps thereby reducing the number of working drivers. Then, after the fares reach an agreed upon number given the lackluster availability, they go back to work with higher than before fares.’ (ibid.)

Aside from utilising pre-existing infrastructure for web-based communication such as forums, chats and social media, it is interesting that research also documents efforts where platform workers, often supported by unions and researchers in the field of information systems, aim at establishing *new* ‘systemic’ structures for coordination. Based on the insight that it is ‘crucial for workers to have opportunities to connect with each other, learn from each other, and impact the platforms they use’ (Whiting et al., 2017:1910), both critical scholars and external pro-worker stakeholders supported platform workers to develop ‘emancipative’ software infrastructures (e.g. Irani & Silberman, 2013, Silberman & Harmon, 2017). Examples of such ‘activist technologies’ (Irani and Silberman, 2013) are Turkopticon, at third party platform allowing workers to give feedback on their customers to help other users to avoid problematic jobs or recommend superior ones, or FairCrowd.work, where platform workers can evaluate apps they work for (Johnston & Land-Kazlauskas, 2018:9). This new ‘systemic’ structures for coordination have been developed to make ‘worker-employer relations visible [...], provoke ethical and political debate’ (Irani & Silberman, 2013:2), study workers’ experiences (e.g.

Gadiraju et al., 2017a, b; Lease et al., 2013; Martin et al., 2014; 2016; Raval & Dourish 2016), and articulate criteria for desirable platform work (e.g. Kittur et al., 2013; LaPlante & Silberman 2015; Sarasua & Thimm, 2014, Harmon & Silberman, 2018). From a theoretical perspective on power, these efforts to change the systemic configuration of power in platform arrangements can have significant effect on episodic power in platform arrangements. In line with Whiting (2017b), this mechanism aims at establishing spaces for counter-discourse and the establishment of counter-publics off-platform, meaning outside the digital infrastructures provided by platform operators themselves.

In addition to novel systemic structures that aim towards decreasing power imbalances in existing for-profit platform arrangements, research has also highlighted efforts to replace for-profit platform infrastructures with *non-profit alternatives*. For instance, various contributions have discussed the prospects of ‘platform cooperatives’ (e.g. Davis, 2016), an alternative model of organising internet-based on-demand services, which ‘embraces technology but wants to put it to work with a different ownership model, adhering to democratic values, so as to crack the broken system of the on-demand economy that only benefits a few’ (Scholz, 2017:14). In scholarly debate, the potential of platform cooperatives is grounded on the insight that

‘the market orientation and organization of sharing economy platforms—as well as whether exchanges are monetized or nonmonetized—are critical characteristics shaping these platforms and their potential to provide truly alternative economic arrangements’ (Schor, 2014).

Thus, research addressing the ‘sharing economy between commons and commodification’ (Dobusch, 2017) has focused on the possibilities and challenges of such cooperative platform models. In the view of some scholars such cooperative platform models bare the potential to provide more local and community-based, more democratic and people-oriented, and environmentally more sustainable alternatives (e.g. Davis, 2015) to its for-profit counterparts (Ettlinger, 2018). Consequently, pioneering efforts to establish such alternative arrangements have been documented recently. For instance, scholars have acknowledged that

(t)he taxi industry (...) has given rise to a number of new cooperative firms in recent years. In Denver, Colorado, Union Taxi Cooperative is driver-owned and has built an app that provides passengers with the option to request, monitor, and rate rides in Denver (Union Taxi Cooperative, 2017), similar to major ride hail companies. Cooperative membership has created a unified group where workers can leverage their membership numbers and power as local business owners to influence local regulations governing such issues as meter rates, traffic rules and transportation planning. When workers are included in the platform development, they can build platforms that promote their own interests. Rather than corporations taking a fee for maintaining the site and connecting workers with a gig, many platform cooperatives minimize the cost to workers by removing the intermediary' (Johnston & Land-Kazlauskas, 2018:18).

Beside the ride-hailing sector, similar models have emerged in digital on-demand work based on activist technologies such as Daemo, a self-governed crowdsourcing marketplace established to improve the work quality of platform users and provide a technological foundation allowing for a 'open-governance model to achieve equitable representation' (Gaikwad et al. 2015:101).

*Synopsis & Discussion: Power-Related Processes in On-Demand Platform Arrangement
Through the Lens of 'Faces' of Power*

The overview on systemic and episodic power 'by' and 'against' platforms above allows to compile a synopsis of the political dynamics between platforms and stakeholders in the field of digital for-profit platform work. Table 6 below provides a condensed overview on the key findings that have transpired from the investigation of literature based on the taxonomy of 'sites' (power 'by' and power 'against' platforms) and 'faces of power' (coercion, manipulation, domination and subjectification) I will subsequently relate these key findings to seminal scholarship on power in organisation and management theory.

Table 6 Condensed Overview on Systemic and Episodic Power in Platform Work Arrangements

Analytic dimension	Power ‘by’ platforms	Power ‘against’ platforms
Systemic face of power ‘Domination’ & ‘Subjectification’ Embedded in socio-normative & socio-technical structures of platforms & platform environments/ institutional ecosystems.	Domination: <ul style="list-style-type: none"> - Cornerstone: Algorithmic management assembling diversified mechanisms. - Algorithmic bureaucracy: pre-defined performance programs & terms of condition (e.g. used to disclaim warranties, restrict liability). - Establishment of user evaluation systems as disciplinary tool. Making platform reputation non-transferable across platforms to curtail workers mobility power. - Setup of communication channels to create information asymmetries, keep customers & workers ‘at arm’s length’ & create a ‘black box’ pre-emptively curtailing users understanding of platform influence mechanisms & distance & alienate users. - Dataveillance: continuous surveillance of user behavior. - Specific workforce management & ‘employment relations’ approach to utilise gaps in institutional relations systems to bolster platform efficiency. Subjectivation: <ul style="list-style-type: none"> - Utilisation of discourse: Rhetoric maneuvers based on discourses of ‘entrepreneurship’ & ‘sharing’ to influence identities, legitimise business models towards workers, customers, shareholders, the public, & prevent labour legislation reforms. 	Domination: <ul style="list-style-type: none"> - Workers’ & external stakeholders’ attempts to establish supplementary digital structures (e.g. Turkopticon, WeAreDynamo) to alter systemic power imbalances and provide opportunities for worker agency in existing arrangement (e.g. by decreasing systemic information asymmetries & providing spaces for collaborative mobilisation). - Platform cooperatives: Organising internet-based on-demand service provision beyond for-profit platform providers to provide ‘emancipative’ digital structures (based. e.g. on activist technology such as Daemo) Subjectivation: <ul style="list-style-type: none"> - Articulation of new ideologies to change arrangements in existing platform arrangements based on self-organised groups & activist technologies - Discourse-based politicking & establishment of counter-discourses geared towards overcoming alienation, bolstering solidarisation & establishing counter-publics.
Episodic face of power ‘Coercion’ & ‘Manipulation’ Utilised in processes & interaction in & around platform settings.	Coercion: <ul style="list-style-type: none"> - Compared to traditional corporations: minor role of direct managerial supervision. - Direct supervision ‘outsourced’ customers which can exercise a certain degree of coercive power based on evaluation mechanisms. Manipulation: <ul style="list-style-type: none"> - Emphasis of diversified non-coercive instruments to prevent classification of workers as employees. - Manipulation mediated by technological ‘actants’. - Provision of selective information. - Manipulation of match-making (e.g. by dynamic pricing). - Rhetoric and behavioural invocations based on discursive sense-making, impression management, nudges & gamification. 	Coercion: <ul style="list-style-type: none"> - Individual use of mobility power. - Concerted strike actions based on self-organised communication. - Individual & collective attempts to change legislation (e.g. concerning worker classification & reputation transferability) to enforce systemic transformation. Manipulation: <ul style="list-style-type: none"> - Individual coping strategies (e.g. strategic online self-presentation & signalling) & workarounds based on tacit knowledge & experience. - Collective coalition-building & concerted action actions to manipulate pricing, induce pressure on platforms & mobilise public support. - Surrogate representation (e.g. Union campaigning for worker protective regulation).

Source: Own compilation.

Concerning episodic power, I found that traditional mechanisms related to the exercise of *coercive power* such direct managerial supervision as play a minor role in the core productive relations of platform arrangement compared to traditional Weberian bureaucracies (Weber, 1947) and industrial organisation characterised by Fordist process management; bureaucratic control; Taylorist management; and relatively stable contract-based regular employment relations within the nexus of the ‘Coasian’ firm (e.g. Davis, 2016a, b; Kalleberg, 2011). While most conventional industrial firms during the 20th century substantially relied on this direct mobilisation of power based on personal oversight and formal authority, platform-based business model are built upon on a combination of algorithm-based systemic power and domination and the outsourcing of direct supervision on customers which can exercise a certain degree of coercive power at the episodic level. However, these algorithmic management systems also strongly rely on various efforts related to manipulation, domination and subjectivation which influence stakeholders in a more indirect way based on rating and evaluation mechanisms. The absence of direct coercion appears as a pre-condition for the platform business model in general. Interestingly, these alternative ways to ensure work coordination based on a stronger emphasis of non-coercive instruments in the ‘diversified portfolio’ of platform influence mechanisms prevents the re-classification of platform workers as employees (Rogers, 2015). As the competitive advantage of commercial platform work is substantially rooted in their legal freelance subcontractor workforce management approach, the utilisation of traditional mechanism of coercion would thus seriously endanger platforms’ general business approach.

On the other hand, workers’ ability to engage in the exercise of coercive power on the episodic level are limited to sporadic strike actions. Focusing on external stakeholder relations I described platform attempt to mobilise their users for episodes of political campaigning as a novel form of power exercise that resembles findings on socio-political studies on organisations where powerful actors, in this case platform providers, use accessible resources and systemic standing conditions, in this case platforms’ ability to use in-app information channels for rhetoric-based political mobilisation, to ultimately fend off unwanted environmental pressures (Lamberg & Pajunen, 2005). On the other hand, workers self-organised ‘grass-root campaigning’, often backed up by unions and activist researchers, have shown to mobilise certain resources in order to pressurise for favourable modifications in platform regimes in episodes of resistance based on off-platform systemic structures for

communication and coordination.

Beyond coercive mechanisms of power, this review unpacked various strategies by which platforms engage in *manipulation* including platforms' interventions in match-making, the purposeful setup and continuous refinement of incentive structures, the provision of selective information, in-app nudges, and in-app rhetoric manoeuvres. Using these measures, platform providers attempt to ensure that platform processes proceed within desired boundaries and with desired economic outcomes.

This portfolio of subtle influence mechanisms includes various elements that resemble power-related processes of manipulation well-known from OMT power scholarship such as issue-framing (e.g. Dutton & Ashford, 1993), discursive sense-making and impression management (e.g. Maitlis, 2004) and exercising power in indirect ways based on the provision of selective information (Aplin & Hegarty, 1980) used to shape processes and outcomes in the tripartite relationship between platforms customers and platform providers. However, the implementation, impact, and consequences of platform manipulation features some distinctive characteristics compared to similar mechanisms in ideal-typically forms of conventional organisations. Three aspects seem important in this respect. First, the bulk of the described measures utilised by platform providers are inscribed in algorithmic mechanisms. Thereby, yet algorithms are established by interest driven human actors, manipulation is increasingly exercised mediated by technological 'actants'¹⁰ in episodic interactions. Second, and related to the former point, episodic political processes between key stakeholders in platform arrangements are increasingly taking space in the digital sphere. While direct human interaction 'at the shop-floor' of plays a crucial role to understand episodic micropolitics in socio-political scholarship investigating conventional organisational settings (see e.g. Becker-Ritterspach et al. 2016) a stronger focus on the role of virtual power games in inter-organisational networks (e.g. Janneck & Staar, 2010) seem crucial to understand the power dynamics in platform arrangements. Third, based on their specific systemic setup, platforms can keep both customers and workers 'at arm's length' (Cherry, 2016) from the platform core processes, creating both a black box where interference is pre-emptively prevented by distancing and alienating workers. This hinders the emergence of solidarisation and thus the emergence of possible counter-power at the 'digital shop-floor' of platforms. – a mechanism

¹⁰ Following Latour (1997) meaning non-human entities that act or to which activity is granted by others and which thus can be a source of an action thereby influencing other actors or other actants in interactive systems.

that strongly resembles classic investigations episodic politicking strategies in tripartite relationships such as the concept of ‘divide et impera’ (‘divide and rule’, Simmel, 1908), meaning a strategy geared towards ‘breaking up’ or avoiding the concentration of power held by specific actors or groups by dividing and isolating them from each other to hold these stakeholders in a powerless position in relation to the key actor implementing the strategy.

Against this background, workers’ efforts to engage in manipulation ‘against’ platforms can be interpreted as a reaction to counter existing in-app regimes. Some interesting forms of manipulation by affected stakeholders can be found in case of gig workers: Based on tacit knowledge and experience with algorithmic workplace control, workers develop coping strategies and workarounds to improve their work situations. Based on self-organised communication this also includes concerted action and innovative strike actions in order to manipulate pricing, induce pressure on platforms and mobilise public support. These political activities are often supported by unions and other external stakeholders and resemble strategies known from power scholarship related to organisational influence tactics such as coalitions-building and developing bases of support (for an overview see Dörrenbächer & Gammelgaard, 2016a, b) as well as the manipulation of political climate e.g. Böhm et al., 2008) and the creation of links with external institutions (e.g. Palazzo & Richter, 2005).

To understand the outlined process of episodic powers in the on-demand platform settings, the specific setup of systemic power is crucial as the foundation for platform efficiency is rooted in mechanisms of domination and subjectivation inscribed in the socio-technical structures of platforms. The cornerstone platform *domination* consists of an elaborated system of algorithmic management which assembles novel ‘technologies of production and discipline’ (Clegg, 1989) such as algorithm-based bureaucracy determining pre-defined performance programs and terms of condition, customer evaluation mechanisms and continuous data collection enabling close surveillance of user behaviour. Based on algorithmic management platforms can thus implement a system of algorithmic domination. This provides an example how the development of new disciplinary technologies already described in other organisational contexts (e.g. Oakes et al., 1998) can provide the foundation of highly effective managerial regimes.

Although these practices continue to be widespread, the domination through platform regimes is challenged workers and external stakeholders via efforts to establish supplementary, emancipative digital structures. In the case of supplementary online platforms such as Turkopticon, the establishment of such structures aims at altering power imbalances in existing platform arrangements by providing a systemic foundation for solidarisation, increasing worker agency, decreasing systemic information asymmetries and providing spaces for collaborative mobilisation in order to increase workers' episodic agency. In contrast, efforts to establish collaborative platforms is geared towards organising internet-based on-demand service provision beyond the sometimes-oppressive regimes of for-profit platform providers. Here, the platform economy provides examples for cases where social movements attempt to create new organisational arrangement that resemble similar projects in conventional forms of organisation (e.g. Hensman, 2003, Contu, 2018). As novel web-technology combined with the 'lean' business model of platform-based service provision allow to launch such structures with comparatively low cost and limited requirements. Interestingly, this could bolster the emergence of further alternative arrangements in the future where, based on the utilisation of algorithmic management techniques in a less problematic manner, more 'emancipative' arrangements could be established. As noted by Davis (2015) 'technology is not destiny: platforms are highly malleable, and there is clearly room for non-corporate alternatives' (ibid.:25). Obviously, this represents an interesting new option for low-power actors to tackle labour issues in existing for-profit setting. While hardly imaginable in conventional industries, for instance due to higher resource requirements, the political strategy of 'simply replacing' existing commercial organisational structures with non-profit substitutes seems to be a realistic alternative in case of certain platform-based service sector business models.

The analysis of platforms scholarship also illustrates the importance of rhetoric and discursive mechanisms that relate to the concept of *subjectivation*. The analysis highlights the significant importance of rhetoric manoeuvres by which platforms strive to influence workers, customers, and external stakeholder based on discourses of 'sharing' (e.g. Belk, 2014; Cockayne, 2016) where platforms portray themselves as innovative proponents of emancipative, entrepreneurial ventures, and pioneers in changing ancient economic regimes. They do so, to legitimise company conduct, to mobilise the support of customer, and to avoid unfavourable legislation. Based on seminal contributions from socio-political scholars in OMT, this can be interpreted

as efforts to carefully manage companies' media image (Carty, 2002), shape new discourses (Spicer & Sewell, 2010), and influence the ideological and political climate (e.g. Böhm et al., 2008; Vaara & Tienari, 2011) as well as law-making and regulatory processes (Kerr & Robinson, 2012). Similarly, platforms frame workers as freelance, entrepreneurial business partners rather than employees in order to mask problematic working conditions and prompt claims for protective regulation and social benefits associated with regular employment. These efforts feature similarities to processes described in other company settings where powerful key actors strive to influence stakeholders' social and professional identities (Hardy & Phillips, 1999; Suddaby & Greenwood, 2005) and foster the alignment of these 'constructed selves' with their organisation (Knights & McCabe, 1997). On the other hand, affected platform workers and other stakeholders have not remained silent in light of these rhetoric-based invocations. Self-organised groups of workers, union representatives, and critical scholars have engaged in efforts related to subjectivation such as counter-speech, efforts to shaping collective identities (e.g., Townley, 1993) and the articulation of new ideologies to change arrangements in existing platform arrangements. These attempts resemble efforts to articulate new ideologies in order to change arrangements in existing industries described by OMT scholar in conventional setting (e.g. Van Bommel & Spicer, 2011). These 'discursive struggles' (e.g. Erkama, 2010; Kovesnikov et al. 2017) often take place within or build upon the digital nexus of the internet in case of platform-based work arrangements. The degree to which these processes are based on the amalgamation of technology-based novel mechanisms with distinct forms of discourse-based politicking strategies certainly exceeds the degree to which this is the case in conventional organisational settings due to the specific characteristics of platform-based organisational arrangements (e.g. Allen-Anderson, 2017).

Summary and Contribution

The review at hand contributes to existing research by providing an integrated review of various power related phenomena in the platform-mediated on-demand work. Essentially, platforms' ability to exercise of power stem from intertwined elements of technology-based, discursive mechanisms, which provide the foundation of systemic power inscribed in platform arrangements. Against this background, direct supervision and control typified as coercive episodic power (e.g., Fleming & Spicer, 2014) is 'outsourced' by customer-involvement based on algorithmic evaluation mechanisms replacing managerial supervision. Similarly, the technological foundation of platforms allows to establish mechanisms of manipulation such as nudges and rhetoric invocations. The cornerstone of platform domination can be seen in algorithmic bureaucracy predefining rules of membership, process patterns, and information flows. The efficiency of this management approach is bolstered by systemic structures allowing for technology-based 'dataveillance'. Similarly, the systemic setup of platforms enables political manoeuvres by which platforms exercise episodic power. Platforms' episodic tactics to steer daily processes of value creation in this respect include the creation and utilisation of information asymmetries based on the purposeful setup of information channels and influencing episodic match-making and exchange processes based on specific structures. Additionally, societal narratives and norms such as neoliberal values and the sharing economy discourse provide the ground for episodic manoeuvres of subjectivation and manipulation, e.g. by addressing workers as entrepreneurs and business partners rather than employees.

These narratives are also used to legitimise platforms business models towards customers, shareholders, the public, and political regulators in order to prevent reforms that would decrease platforms' economic efficiency. Consequently, institutional environments often bolster platforms business models attempts for 'regulatory arbitrage' (Shapiro, 2017) as 'gaps and cracks' in national employment legislation allow platforms to classify workers as freelance subcontractors and, thus, support platforms' economic efficiency while, at the same time, exclude platform workers from social protection, codetermination and interest

articulation¹¹.

Regarding the reactions of affected workers and other stakeholders facing the novel arrangements of platform-based work organization and the corresponding platform policies, research highlights both individual and collective activities by which workers and other stakeholders attempt to safeguard their interests and resist at the episodic level. Concerning individual coping strategies, workers are found to engage in self-protective behaviour, strategic online self-presentation and signalling to achieve more favourable outcomes of their work activities. Additionally, in some segments of on-demand economy workers use a certain degree of mobility power resulting from platforms' low entry- and exit-barriers.

¹¹ Until now, the basic workforce approach of formally classifying platform workers as freelance employees, and to thus bypassing protective regulations and avoiding fixed personnel costs, has been applicable for most platform companies in most countries' regulatory contexts (e.g. Adam, 2017; Cherry, 2016; D'Cruz & Noronha, 2018; Drahokoupil & Piasna, 2017, 2019; Fabo et al., 2017; Graham et al., 2017; Vandaele, 2018; Wentrup et al., 2019). However, legal struggles about worker classification continue in various markets where platforms operate, and recent court decisions indicate that future modifications of local labour regulations in light of the emergence of platform-based business models might curtail this policy, as some lawmakers have started to doubt platforms' common self-portrayal as 'two-sided marketplaces' or 'mere service providers. For instance, Anderson (2016) has reported on a lawsuit brought by Uber and Lyft drivers attempting to be classified as employees in the US. Uber's initial request to dismiss the case was denied by US District Court Judge Edward Chen, who made the 'unusual move' (ibid.) to cite Foucault in his official statement. He emphasised that 'Uber drivers...are monitored by Uber customers...during each and every ride they give, and Uber's application data can similarly be used to constantly monitor certain aspects of a driver's behavior. This level of monitoring, where drivers are potentially observable at all times, arguably gives Uber a tremendous amount of control over the "manner and means" of its drivers' performance. Cf. Michel Foucault [sic], *Discipline and Punish* (a "state of conscious and permanent visibility [] assures the automatic functioning of power)". Similarly, commentators have associated Deliveroo's recent withdrawal from the German market with managerial concerns about local labour law (see e.g. Link, 2019).

This highlights the role of the national business systems (e.g. Ferner & Quintanilla, 1998) institutional ecosystems (e.g. Meijerink & Keegan, 2019), and industrial regulation systems in which platforms operate. From a socio-political perspective, changing legislation might lead to significant future transformations in the socio-technical relations among stakeholders in platform-based work arrangements. Future changes in legal environments might enable or restrict how certain platform business strategies can be applied. Reforms in industrial relations regulations regarding, for example, gig workers' legal employment status, minimum wages, and rights and obligations in relation to collective bargaining might provide workers with more elaborated power resources and 'robust tool-kits' (Williams & Geppert, 2011) to safeguard their interests (e.g. De Stefano, 2015). While not the key focus of this review, several academic contributions point to the impact of different institutional environments in which platforms operate (e.g. Uzunca et al., 2018; Wright et al., 2017). Future comparative studies could depart from these findings and, based on socio-political concepts, provide a more systematic and clear-cut picture of how different regulative, socio-economic, and normative environments affect the institutionalisation of power in platform work settings and the resulting labour conditions. An important question in this context is how power relations in more problematic and less problematic platform-based work arrangements systematically differ due to heterogeneous national business systems (Ferner & Quintanilla, 1998), institutional ecosystems (Meijerink & Keegan, 2019), and industrial regulation systems.

Moreover, workers manipulate algorithmic process coordination by developing ‘workarounds’ based on their knowledge about algorithmic mechanism derived from their working experience. In addition, research also points to collaborative forms of episodic action which build upon the establishment of complementary systemic structures such as self-organised ‘off-app’ digital communication networks and platforms geared towards overcoming alienation, bolstering solidarisation and establishing counter-publics to ultimately increase worker agency, decrease systemic information asymmetries, provide spaces for collaborative mobilisation and provide platforms for coalition-building with external third-party stakeholders. These activist networks and platforms provide workers with opportunities for collaborative forms of episodic resistance, such as algorithm manipulation and ‘surge pumping’. Beyond this both workers and external stakeholders engage in activities geared towards altering or even replacing the, sometimes oppressive, systemic arrangements established by commercial on-demand service platforms, e.g. by legal strategising in order to force platforms to alter these structures in a way favouring workers or providing alternative, cooperative platform structures that bare the potential to provide more ‘local emancipative alternatives to organise platform-mediated service provision.

Outlook and Avenues for Further Research

Based on these key findings, the review provides scholars of power theory overview of the way power-related phenomena addressed within the context of platform work scholarship. This is highly important as the analysis illustrates that power is a crucial aspect to understand platform-based organisation, which however, is not fully conceptualised in existent platform research. Consequently, further analysis based on power theory scholarship seem to be vital to theoretical progress within this emerging field of inquiry. Similarly, the empirical field of platform-based organisation can inform further development of power theory. Based on the review at hand I propose four promising fields of future research:

First, future research should focus the study of *processes and permutations of power configurations in platform settings*. While the paper at hand provides an initial understanding of how different sites and faces of power manifest in platform settings, existent platform research hitherto lacks nuanced analytic frameworks for longitudinal investigations studying how power relations in platform settings evolve over time, how they get stabilised, or when and how the relative configuration of power between stakeholders in platform settings permute. While existent studies provide some dense descriptive analyses of change processes in platform settings, usually based on single case observations such a framework could provide an analytical blueprint to compare these cases and shed light on the prerequisites, pathways, and patterns of change of power relations in specific settings. Building upon the findings gathered in this review, such an analytical template could also guide comparative analyses of power in heterogeneous gig work settings which are hitherto scarce. It could be developed based on power theory. Particularly, Clegg's model of 'Circuits of Power' seems promising here. This framework is geared towards tracing the 'explicit mechanism for (...) the exercise of power' (Lapsley & Giordano, 2010) as the framework conceptualises in detail how systemic power embedded in relatively durable societal and organisational structures affects episodic power by providing standing conditions of episodic power and processes. The framework thus 'allows researchers to identify and understand both how power shifts across actor networks and how power generates such networks' (Oliveira & Clegg, 2016:426). Building upon the initial insights gathered here, a circuits of power-based framework could thus capture how actors use their agentic power in certain episodes to either alter or consolidate existing configurations of systemic power – for instance in cases where powerful actors strategise to solidify and enlarge dominance or sequences of power-related episodic

processes where low-power actors such as worker collectives attempt to gain access to new power sources in order to widen their room for agency in future episodes to challenge existent relations. This could help to provide a more clear-cut understanding of both inertia and dynamics of power in the platform settings. Similarly, it could inform systematic longitudinal studies on the permutations of power in related settings.

Second, power theory can benefit from platform research since the field provides the opportunity to investigate *innovative forms of mobilisation* both by and against platforms, in cases where episodic processes of power such as public campaigning or coordinated strike action are organised based on novel technological structures. As reported by Collier et al. (2018) and others (e.g. Berg, 2015; Curchod, 2019), platforms have used their basic infrastructure for public campaigning against unfavourable legislation:

The app provides both a list of drivers and customers and an efficient way of communicating with them. It has been a powerful tool in mobilizing customers and drivers to advocate for Uber's position on regulatory matters by merely clicking a link. For instance, in New York and Austin, Uber presented a new "view" of its app, designed to target officials who had proposed vehicle caps and fingerprinting, respectively. When customers opened the app, a pop-up message appeared, asserting that New York City Mayor Bill De Blasio and Councilwoman Ann Kitchen were proposing regulations that would make it impossible for Uber to operate. Customers were then provided a link to register their opposition to the regulations. (Collier, 2018:11-12)

This 'clicktivism' mobilising users to engage in political interest articulation on behalf of platforms is based on the specific IT-mediated relationship of platforms and users that allow providers to directly access customers far easier than in conventional company-customer relations (Culpepper & Thelen, 2019). Based on this systemic setup, platforms can influence political processes and the way political issues are presented to users, for instance based on techniques such as selective information and issue framing. Combined with in-app, one-click response options which presumably increase the likelihood to get users to mobilise users to vote according to platforms' interests. Hence, further studies should pay closer attention to how effective platforms are able to generate political user support based on their established IT-structures.

On the other hand, I pointed to innovative individual and collective strategies and workarounds used by platform workers to improve their income and work quality or to undergo platform surveillance based on individual and collective action such as collective logouts. However, it is indicated that these episodic manoeuvres trigger strategic responses.

For instance, Uber drivers were found to use so-called ‘fake-GPS’ applications providing the platform with false information about their location in order to increase their chance to become assigned to profitable rides (e.g. Codagnone 2016; Martin et al., 2016; Lee et al., 2015; Shapiro, 2017). However, the company has reacted when these practices came to light and added new app-features to detect these applications and prevent the app from operating while such software is running on drivers’ devices (JC, 2017). Similarly, recent reports in the UK Guardian point to similar dynamics in the on-demand economy, drawing parallels to historical cases of workplace resistance:

‘Organised resistance by digitally outsourced workers has erupted repeatedly on the streets of major cities in recent years, usually beginning in the back-alley spots where delivery riders are encouraged by their apps to congregate and then fanning out rapidly through WhatsApp networks, word of mouth and some technological trickery. In 2016, for example, an announcement by Deliveroo that it would soon be unilaterally altering its rider payment structure prompted a six-day “strike” in which riders acted en masse to make themselves unavailable for orders. Colleagues from Deliveroo’s rivals, Uber Eats, swiftly followed suit, and began taking advantage of a promotional offer within the app that granted new customers £5 off their first order. By repeatedly creating new accounts and ordering low-value meals to be delivered to the picket line, the strikers amassed both a mountain of free food at Uber’s expense and a steady stream of fellow riders, who would turn up with the order only to be met by a sea of radicalised peers cheering their arrival and chanting “Log out, log out!” In the words of one Deliveroo rider, the very technology that was designed to control workers was now being turned against their managers, allowing riders to “occupy the system in a way”. Not unlike the assembly line of the last century, and the auto strikes in Flint that subverted it, a tool engineered for capital was being hacked by the labour force’ Shenker, 2019.

Although these political dynamics require further investigation, they have so far not been focused systematically in existent research. In my view, this is unfortunate since further research geared towards conceptualising such patterns of action and reaction in subsequent episodes of micro-political game-playing (e.g. Dörrenbächer & Geppert, 2009; Geppert et al., 2015) in platform-based arrangements could provide valuable insights on novel forms of socio-political struggles in technology-based organisational arrangements. Such studies could, for instance, build upon the existent body of research on processual dynamics of power in organisational settings (e.g. Buchanan & Badham, 2008; Clegg et al. 2006; Thomas, a, b et al., 2011;) and concepts and insights on politicking and issue selling in organisations (e.g. Allen et al. 1979; Bouquet & Birkinshaw, 2008a, b; Dörrenbächer & Gammelgaard, 2011, 2016;

Janneck & Staar, 2010). Similarly, power theory can help to provide a conceptual template for such analyses which could, for instance, be provided by building upon the circuits of power-based analytic framework I outlined above. Such analyses could also provide opportunities for more interdisciplinary investigations e.g. by aligning concepts from socio-political scholarship with insights from studies on e-democracy (e.g. Kneuer, 2016) and social movement theory (e.g., Zajak, 2013; Zajak et al., 2018). Beyond the analysis of power dynamics, such investigations could provide deeper insights into the societal impact of platform politics, for example, regarding the extent to which new forms of mobilisation can provide blueprints for employee voice within and beyond the boundaries of the sharing economy or assess the efficiency and impact platforms' involvement of users in political campaigning.

Third, research on platforms could benefit from a stronger consideration of discursive perspectives on power in business and organisation studies (e.g. Vaara 2003, Vaara & Tienari, 2008; Vaara et al. 2010) as well as further empirical studies of platforms could provide the foundation *for enhancing discursive perspectives in socio-political scholarship*. The role of platform rhetoric and discursive manoeuvres is made relevant in various contributions within the field of platform scholarship. In public communication platforms utilise discursive manoeuvres to legitimise and promote their business models toward customers, the broader public, as well as politicians and regulators deciding on worker classification. Company rhetoric is extensively used as mechanism of subjectivation, for instance when platforms strive to motivate workers and attempt to construct entrepreneurial identities by 'affective framing' (Allen-Anderson, 2017) based on 'in-app' messages. Yet these manoeuvres are well-documented in platform research, we hitherto lack systematic and representative studies comparing platform rhetoric with those of conventional for-profit ventures which have been studied e.g. in the field of discursive studies on multinational corporations (see Becker-Ritterspach et al. 2016 for an overview). A beginning point for such investigations could be to identify types of discursive micropolitical manoeuvres (e.g. drawing upon Clark & Geppert, 2011; Vaara & Tienari, 2008; Vaara & Moni, 2010, Dörrenbächer & Gammelgaard, 2016b) and investigate larger media samples using the resulting taxonomy as a framework for comparison. These could help to inform ongoing 'what is new after all'-discussions underlying much of current research in the emerging field. Moreover, due to the newness of platform business models regarding at least their technological foundations, the amalgamation of for-profit shareholder value and non-profit sharing discourse (e.g. Belk, 2014; Cockayne,

2016; Fleming, 2017), and the fact that successful self-portrayal seems crucial to platforms to immunise against regulatory threats related to worker classification, mechanisms and patterns of discursive sense-making might significantly differ from those known e.g. from MNCs concerning their importance, contents and patterns require further attention.

Similarly, the role, patterns and impact of counter-discourses might provide fertile grounds for further studies of discursive power. Compared to discursive manoeuvres *by* platforms, analyses of counter-discourse by workers, unions, and other critical stakeholders are comparatively sparse. Although discourse-based resistance and mobilisation is touched upon in some contributions (e.g. Acquier et al., 2017), we lack deeper knowledge regarding which types of arguments are made in which settings by which stakeholders as well as how, when, and why certain counter-discourses are more or less successful. Related to this, the empirical field of commercial platform arrangements seems fruitful for studying the dynamics of discursive struggles due to the ongoing and vivid controversies about these companies in public and academia. This coexistence of enthusiastic approval and harsh and harsh critic as well as the constant efforts of platforms to react to related accusations could also be valuable to provide empirical ground for studies geared towards providing a more clear-cut understanding of defensive rhetorical strategies by platforms. Such investigations might benefit from seminal contributions on management use of concrete language in shareholder communication (Pan et al., 2018), rhetoric ‘tools for legitimacy’ (e.g., Barros, 2014) and research on managerial practices of public apologies (e.g. Hargie & Stapleton, 2010). This might be promising due to the newness of the platform work whose emergence began during the early 2010s as consequently, a plethora of rich data is easily accessible which could be used to study the emergence and permutation of these discursive strategies using a longitudinal perspective in order to gain deeper knowledge regarding how different rhetoric arguments are introduced, altered, and contested by actors in emerging organisational fields.

Finally, scholarship could benefit from a stronger consideration of *techniques of manipulation which are based on the technology-embedded nudging and gamification*. Platform studies indicate the widespread use of these subtle techniques which are based on insights from behavioural science (e.g. Thaler & Sunstein, 2008, Kahneman & Egan, 2011) to influence workers behaviour (e.g. Calo & Rosenblat, 2017; Cherry, 2012; Leismester & Blohm, 2013; Schmidt, 2016; Yang et al., 2018). Further studies focusing on this behavioural component of manipulation in platform settings might provide opportunities to refine actor

conceptualisations in organisational power theory. In the last decades, the field has significantly progressed beyond simplistic homo economics-based conceptualisations of actors in organisational settings (Geppert & Dörrenbächer, 2014) by highlighting e.g. the role of identity, social relations, organisational culture, and discourses (e.g. Morgan & Sturdy, 2000; Vaara & Tienari, 2011; Vaara et al, 2005). However, the role of mechanisms which influence actors in organisational settings and employment relations based on subconscious techniques rooted in fundamental physical and cognitive mechanisms has not been systematically included in conceptualisations of actors in theoretical concepts of power in organisations up to date. A stronger focus on such mechanisms based on insights from platform scholarship could help to complement existing insights on the mechanisms by which systemic power configurations affect episodic processes in organisations. This seems to be important since platform settings viewed as ‘frontrunner management domain in employing gamification’ (Morschheuser et al., 2018:1) continue to gain importance in various sectors and, bolstered by continued digitalisation, and consequently, the management practices and influence mechanisms applied in these settings increasingly also provide blueprints for other organisations beyond the boundaries of the sharing economy (Aziz et al. 2017; Hamari et al., 2014; Koivisto & Hamari, 2019).

A ‘Circuits of Power’-Based Perspective on Algorithmic Management and Labour in the Gig Economy

Abstract

Contributions to digital business so far provide mainly descriptive and hardly systematic analyses when it comes to the study of power-related phenomena within the gig economy. We particularly lack systematic, integrative studies which focus on interdependencies of power relations, labour conditions and business model efficiency based on robust theoretical approaches which capture meso-level structures and micro-level dynamics of power simultaneously. Our conceptually oriented paper addresses this gap by investigating power relations in platform arrangements, based on the framework of ‘circuits of power’. We use the case of the ridesharing platform Uber, which has caused controversial debates in and beyond academia to illustrate how framework, combined with concepts from labour process theory, behavioural economics and micro-politics, can be applied for a systematic analysis of the diversified portfolio of power-related control and influence mechanisms that are embedded in platforms’ software infrastructures. Departing from this, we examine how our approach can inform future research beyond Uber focused on assessing specific forms of management, organization and work in the gig economy. Our discussion concentrates on a) the classification and comparison of heterogeneous forms of gig work; b) the assessment of labour-related problems; and c) power-related organizational dynamics or inertia in such settings. The latter point is related to the central question of why employee voice and resistance are rare in certain gig-work arrangements.

Keywords: *Uber, gig economy, circuits of power, algorithmic management, organizational control, labour conditions*

Introduction

Gig-work platforms present a specific type of digital business model that is based on online software applications to coordinate operations. Platforms build lean (Heiland, 2018) software-based organizational architectures to support semi-automated ‘algorithmic management’ (Lee et al., 2015) ‘driven by algorithms’ and ‘fuelled by data’ (Van Dijck, 2016). A characteristic of these models is the provision of on-demand services in the absence of conventional employment relations. Services are provided by ‘gig workers’, who are formally classified as independent contractors or micro-entrepreneurs (e.g. Kuhn & Maleki, 2017, Risak & Warter, 2015;). The work relationships are market-mediated (e.g. Kalleberg, 2011; Wood et al., 2019a, b) and ‘account membership’ replaces a conventional employment contract (Kirchner & Schüßler, 2018)¹².

Uber and Lyft (ridesharing), Foodora and Deliveroo (food delivery) and Postmates (courier services) present a specific type of platform enterprises. They provide on-demand services that require local execution. Academic and public discussion about these platforms is controversial. Although these platforms can provide high autonomy (Schmidt, 2016) and income opportunities for marginalized worker populations due to low entry barriers (e.g. Rosenblat & Calo, 2017), Uber and the other platforms have received substantial criticism. They are accused of offering ‘precarious working-class jobs’ (Scholz, 2013:1; Schor et al., 2015) as their freelance subcontracting approach bypasses the protective labour regulation and obligations that are associated with regular employment. This contributes to a ‘severe commodification of contingent workers’ (ibid.). Thus, this business approach is considered problematic for the well-being of ‘gig workers’ (e.g. Bajwa et al., 2018a) and research indicates low levels of mutual trust between workers and platform providers due to the delicate labour conditions (Wentrup et al., 2019). Whilst problematic for workers, this workforce management approach is considered beneficial for platform providers as it allows for the externalization of costs and risks which would occur in the context of regular employment. Hence, the ‘strategic legal misclassification’ of gig workers as freelance ‘business partners’ rather than employees is seen as crucial building block for the economic

¹² There is a vivid and interesting debate about the classification of gig workers, in terms of their legal and theoretical status as employees versus independent subcontractors (see e.g. Felstiner, 2011; Kuhn & Maleki, 2017; Capelli & Keller, 2013, Kirchner & Schüßler, 2018; De Stefano, 2015). To date, Uber workers remain legally classified as independent subcontractors. However, research suggests that in various ways, Uber gig workers strongly resemble employees.

success of these platforms (e.g. Srnicek, 2017).

Researchers have related labour issues and these efficiency-seeking strategies to specific power relations between platform providers and gig workers. For instance, the ability of platforms to unilaterally set the formal terms and conditions of account membership and to prescribe processes by designing platform software infrastructure is described as an ‘asymmetric order’ based on ‘algorithmic bureaucracy’ (Kirchner & Schüßler, 2018). Similarly, Wood et al. (2019a) examine the ‘weak structural power’ of digital workers. Power asymmetry is seen as an ‘outcome of platform-based rating and ranking systems’ (ibid.:15) enabling high levels of control. It has been linked to problematic labour conditions, such as ‘overwork, sleep deprivation and exhaustion’ (ibid.). Rosenblat and Stark’s study on ‘algorithmic control’ at Uber (2016) draw attention to various related mechanisms embedded in the platform’s organizational setup. These features are ‘fundamental to its ability to structure control over its workers’ (ibid.:3758). Thus, the study of power relations in gig-work settings seems important to understand how specific management strategies of platforms relate to labour conditions in the emerging digital economy.

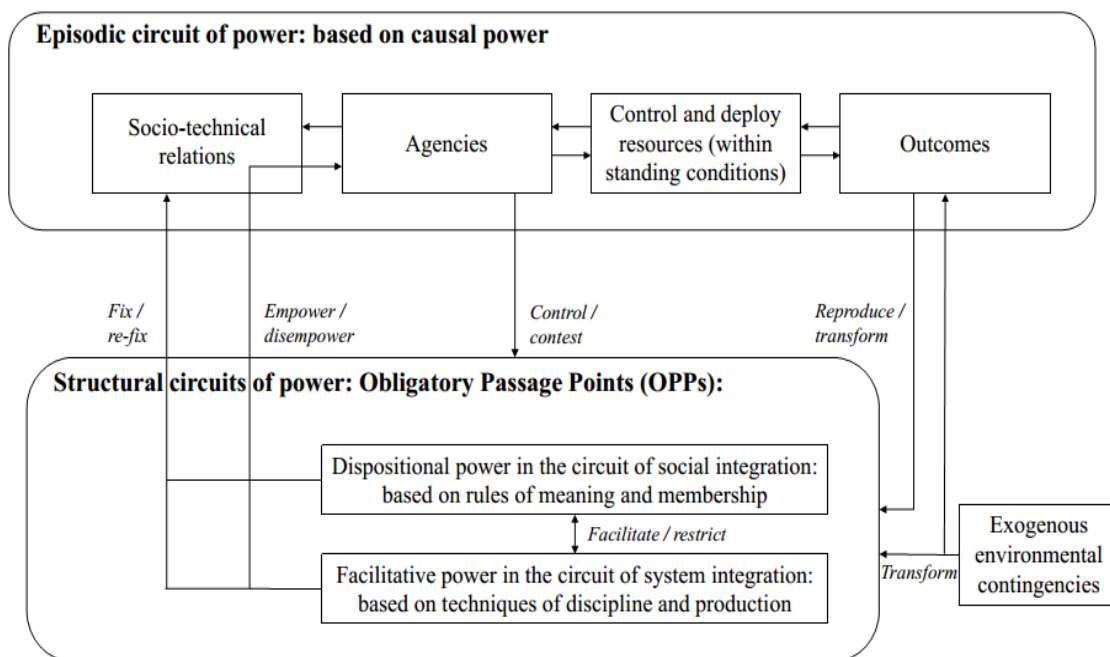
In line with this, issues of power and labour underlie many contributions to the field of digital labour with existent studies highlighting the role of standing conditions and organizational structures which influence power relations in the context of platforms at the meso-level of organizations as well as the situation of gig workers and how their work processes are controlled at the micro-level, based on the exercise of power (e.g. Aloisi, 2015; Bauer & Gegenhuber, 2015; Fieseler et al., 2017, 2017; Gillespie, 2014; Harmon & Silberman, 2018; Malin & Chandler, 2016; Nachtwey & Staab, 2016; Schor, 2017; West, 2019). However, we hitherto lack a holistic theoretical framework of power in the gig economy to integrate these findings and capture how case-specific meso-level conditions, such as organizational structures, affect organizational interactions and work processes. Such a systematic and integrative framework seems necessary to understand how specific power configurations emerge, become stabilized or change, and how they relate to more-or-less problematic working conditions in various gig-work settings. This conceptualization would introduce a theoretically elaborate foundation for studies of power to gig-work scholarship. It would also help to draw clear lines between ‘the good, the bad, and the ugly’ in the gig economy vividly discussed in recent academic debates (e.g. Kalleberg & Dunn, 2016; Davis, 2015, 2016).

To provide such a conceptual foundation, we propose to apply key ideas of the ‘circuits of power’ approach (Clegg, 1989) to the study of management, organization and work arrangements in platform businesses. To do so, our paper is structured as follows: Departing from an introduction of the circuits of power framework (section 2), we illustrate how power relations in platform businesses can be studied based on Clegg’s approach, drawing on the case of the U.S ridesharing provider Uber to illustrate our argument (section 3). Next, we discuss our contribution to power theory and gig-work scholarship (section 4) and finally reflect on how our study can inform further research (section 5).

The Circuits of Power Approach

The circuits of power approach (Clegg 1989; Clegg, et al., 2006) is an established theoretical framework that provides a flexible ‘power compass’ (Mumby, 2004) to ‘explain the relative capacity of various actors to influence organizational relations’ (Oliveira & Clegg, 2015, Figure 1). The framework has informed research in diverse contexts, ranging from analyses of power in historic and contemporary societies (Clegg, 1989) to contributions on identity regulation in organizations (Alvesson & Willmott, 2002), organizational information systems (Silva & Blackhouse, 2003), and power relations in multinational corporations (e.g. Mezihorak, 2018; Pedraza-Acosta & Mouritsen, 2018; Vaara et al., 2005).

Figure 2. Framework of Circuits of Power



Source: Own compilation based on Clegg & Oliveira, 2015:444.

Clegg’s analysis of power emphasizes the disciplinary and restrictive effects of power as well as its *facilitative effects* as core force keeping systems of organized coordinated action coherent (Clegg, 2006)¹³. Power is understood as a *relational and generic* phenomenon seen

¹³ This conceptualization of organizations as ‘partial organizations’ (Ahrne & Brunsson, 2011) stresses the ‘interactive’ constitution of organizations and thus highlights the existence of patterns of repeated, coordinated cooperation instead of formal structures boundaries as key characteristic defining what an organization is. Accordingly, we viewed platform businesses or ‘platform arrangements’ as such a ‘partial organization’. These

as medium and capacity of actors that facilitates the emergence of relatively stable patterns of social relations and coordinated, goal-attaining interaction. The framework integrates micro-, meso-, and macro-level analytical perspectives based on the idea that power, ‘like electricity [...] circulates through social relations, working practices, and techniques of discipline’ (Blackhouse et al., 2006:415) in any organizational arrangement. Accordingly, three interrelated circuits of power are distinguished:

1. The *circuit of episodic power* captures episodes at the organizational micro-level of processes, including the exercise of power in conflictual situations. It also includes ‘business-as usual’ interactions, echoing notions of ‘causal power’ (e.g. Weber, 1921; Dahl, 1957). In ongoing interactions, agencies, i.e. individual or collective actors such as managers or workers, interact within established socio-technical relations by using means and power resources (e.g. access to information, networks, knowledge) available to them when pursuing their interests. These power-related processes at the episodic micro-level of organizations are embedded in social meso- and macro-structures. To understand the constitution of these standing conditions, Clegg – drawing mainly on Foucault (1977, 1980), Parsons (1951), and Callon (1986) – relates them to two additional ‘structural circuits of power’ (Oliveira & Clegg, 2015) which analytically capture the conditional environment of episodic processes.
2. The *circuit of system integration* captures material conditions in organizational settings, which consist of techniques of production and discipline, such as [...] machinery, information systems, organizational structures and [...] processes’ (Clegg et al. 2018:9). These ‘structures of domination’ (Geppert & Dörrenbächer, 2014) enable certain powerful actors to implement mechanisms of surveillance, discipline and control, evaluation and incentives, all of which affect episodic processes and the power resources of other agencies.
3. The *circuit of social integration* ‘captures prevailing rules of practice shaping actors’ dispositions to behave in certain ways’ (Clegg et al., 2018:9). This circuit includes the immaterial aspects of organizational arrangements, such as formal and informal *rules of meaning and membership*. In line with Foucauldian and neo-institutionalist scholarship

organizational systems of coordinated action are influenced by internal and external stakeholders who possess varying degrees of power.

(e.g. DiMaggio, 1988; Meyer & Rowan, 1991), these ‘rules of the game’ (Geppert & Dörrenbächer, 2014) provide organizational decision-makers with dispositional power. This allows them to prescribe and legitimize processes and templates and to assign specific roles, rights, and responsibilities to the various agencies.

Both facilitative and dispositional power rooted in the circuit of social and systemic integration together become ‘institutionalized’¹⁴ and are inscribed in obligatory passage points. Clegg uses this concept – derived from actor-network theory – to draw attention to the ‘nodal points’ (Callon, 1986; Latour, 1997, 2005) of organizational power, where structural and episodic power intersect. Obligatory passage points institutionalize the rhetorical and material ‘devices [...] channelling and framing the “conduct of conduct” (Dean, 2013) in specific situation[s]’ (Clegg et al., 2018:10). The concept of obligatory passage points is thus crucial for analysing interdependencies, intersections and dialectics at the micro-level, as well as episodic processes with the structural configuration of power at the organizational meso-level.

¹⁴ We use the term ‘institutionalization’ in this sense of an existing and relatively stable organizational ‘status quo’. We do not imply ‘taken-for-grantedness’ in the sense of ‘institutionalization’ in the tradition of Berger & Luckmann (1991). Instead, we stress that ‘negotiated orders’ (Strauss, Schatzman, Ehrlich, Bucher, & Sabshin, 1963) within an organization, once established, tend towards persistence and inertia to a certain degree (notwithstanding that this ‘status quo’ might of course become subject to modification well as the can still be questioned and challenged in various ways, i.e. by interest-driven stakeholder campaigning).

Platform Businesses and Gig Work from a Circuits of Power Perspective

Next, we turn to the illustrative case study of Uber, where the circuits of power approach is applied to gain insight into how the power relations of a platform business are constituted, and the effects of those relations on the labour conditions of gig workers. Uber has gained particular public and academic attention. The company is often used as an ‘iconic’ example to illustrate, on the one hand, the economic success and potential of platform businesses, and on the other hand the ‘problematic’ aspects (De Stefano, 2015) of certain gig-economy business models for the affected gig workers. In our view, this makes Uber a suitable case for analysing the power relations in platform arrangements. Based on seminal contributions on Uber in its home country, we will especially point to intersections of episodic and structural power relations and illustrate both their facilitative and restrictive character. We propose the following ‘heuristic template’ (Table 7) which will guide our analysis:

First, we examine Uber’s initial ‘socio-political setup’ (standing conditions) in terms of actors, interests, scope of agency and the technologies of production and discipline. These provide grounds for the establishment of a distinct setup of power-related control and influence mechanisms inscribed in the platform’s algorithmic management approach.

Second, we analyse specific control and influence mechanisms at Uber, which we conceptualize as a distinct setup of obligatory passage points.

Third, we illustrate how these mechanisms ‘top-down’ constitute processes, interactions, and episodes of power – that is, how they influence day-to-day organizing processes at the platform business. We also examine both their facilitative effects, in terms of business-model efficiency, and their restrictive effects in terms of labour conditions.

Fourth, we link the circuits of power approach with ideas of micro-political scholars to demonstrate how these control-and-influence mechanisms curtail gig workers power thus limiting their opportunities for voice, bargaining and resistance. We also demonstrate how this specific power-related processes in the ‘problematic case’ of Uber thereby tends to reify and stabilize initial power asymmetries between providers and workers at a structural level.

Table 7. Heuristic Template to Study Platform Power Relations Based on the Circuits of Power Approach

Analytic Dimension/ Step of analysis	Relevant sub-concepts derived from Circuits of Power	Guiding questions for the study of gig-work arrangements
Standing/initial conditions for 'socio-political setup' of focal platform Section: 'Uber's Socio-Political Setup'	Key actors and agencies, interest of key agencies, technologies of production and discipline.	Which are the key agencies? What are the interests of key actors and agencies? (e.g. platform providers and gig workers). How do the interests of key agencies and actors differ? Which technologies of production and discipline are available to key agencies to set up platforms' software-based obligatory passage points? Which actors control the setup of software-based obligatory passage points, and to what extent?
Control and influence mechanisms institutionalized in platforms' software infrastructure Section: 'Control and Influence Mechanisms'	Software-based obligatory passage points.	Which control-and-influence mechanisms are utilized by key agencies (e.g. platform providers) to steer episodic processes of production and service provision?
Top-down perspective: Effects on process management and business model efficiency Section: 'Labour- and Efficiency-Related Outcomes'	Impact of mechanisms embedded in software-based obligatory passage points on episodic circuit of power, focusing on the facilitative facet or effects of power.	How does the specific mechanisms used for software-based work and process organization in focal case contribute to the business model efficiency of the platform?
Top-down perspective: Labour-related outcomes, effects on working conditions Section: 'Labour- and Efficiency-Related Outcomes'	Impact of software-based obligatory passage points on episodic circuit of power, focusing on the restrictive, disciplinary and punitive facet or effects of power.	How does the specific mechanisms used for software-based work and process organization in focal case affect work quality and labour conditions?
Bottom-up perspective: Micro-political Implications and outcomes for structural power relations Section 'Micro-Political Implications and Outcomes on Structural Power'	'Transformative' vs. 'reproductive' outcomes of episodic processes that affect structural circuits of power.	How does the specific approach of software-based work organization in focal case affect structural power relations between key agencies (e.g. platform providers and gig workers) in continuous interaction (e.g. by reifying or altering existent power asymmetries)?

Source: Own compilation.

Uber's Socio-Political Setup

Investigating Uber based on this heuristic template, platform providers¹⁵ and drivers¹⁶ present the key agencies, each pursuing specific interests. The *interests* of platform providers and drivers only partially match (Calo & Rosenblat, 2016; Nachtwey & Staab, 2015).¹⁷ A core interest of gig workers is finding decently paid work with a predictable and steady income, transparent pay rates, and opportunities for self-determined and flexible working hours. In contrast, Uber's key objective as a for-profit enterprise is focused on generating profits based on lean, semi-automated management and its app-based subcontracting approach (Srnicek, 2017; Scholz, 2017). For Uber, efficient operations rely on managing the fluctuations in demand and supply (Kirchner & Schüßler, 2018) to pursue its economic objectives. Its software infrastructure, which allows for semi-automated process coordination, is the core technology utilized by the platform to pursue this aim. Hence, Uber – like other platforms – implements mechanisms of managerial control in its application, thereby ‘inscribing rules into the technology, so that only rule-conforming processes allow for successful user activities’ (ibid.:14). In this kind of platform-based work organization, software devices can be conceptualized as the core obligatory passage points; they are a technology-based ‘conduit through which traffic must necessarily pass’ (Clegg, 1989:206). The shape of power relations in platform business models is thus fundamentally influenced by the way power-related mechanisms are established in these software-based conduits.

¹⁵ Research indicates distinct power-related processes and conflicts between different actors (or groups of actors) within the core of the platform, which is organized as a conventional Coasian enterprise (Davis, 2016) based on contracts. Research also indicated problematic labour conditions, echoing studies on problematic work among highly qualified workers such as software developers. These cases provide a fruitful field for critical scholarship. However, we do not focus on this aspect as the issues appear quite different. In addition, interaction between gig workers and Uber is almost entirely app-based (Nachtwey & Staab, 2015), thus making Uber appear as a ‘black box’ to the workers. Hence, a detailed analysis would not contribute to the purpose of this paper.

¹⁶ We focus on power relations between platform providers and gig workers and the resulting labour conditions; hence, we mainly concentrate on these two stakeholders in our discussion.

¹⁷ Similar to all capital-labour relations, some overlap occurs between consent and conflict (see e.g. Burawoy, 1979). However, the power-related processes we study here genuinely relate to structural conflicts between platform providers and gig workers. Thus, we focus on the divergence in interests between platforms and gig workers in the remainder of our paper.

In the case of Uber, the ability of various actors to control obligatory passage points differs markedly. While gig workers' influence is limited or lacking, Uber possesses far-reaching competences to design the platform's app-based infrastructure 'from scratch' (e.g. Calo & Rosenblat, 2017; Davis, 2015). This power results from the legal setup, ownership structure and governance model of the company. Uber draws on vast *user-generated* and *process data*, such as GPS-based information about drivers' speeds, breaks, log-in and log-out-patterns, ride acceptance rates, reactions to pop-ups and internal messages, and rider evaluation systems. This privileged access to masses of data 'create[s] an extensive reservoir for quasi-panoptic observations' (Kirchner & Schüßler, 2018:10). In terms of circuits of power, this exclusive access to data, together with far-reaching competencies to design software infrastructure, provides a core technique for production and discipline that is fundamental to Uber's operations.

Control and Influence Mechanisms

Next, we examine various control-and-influence mechanisms implemented in software-based obligatory passage points. We illustrate how these mechanisms influence the behaviour of Uber drivers and control their work arrangements and processes. In our illustrative case discussion, we also refer to findings from research in work and organizational sociology, labour process theory, and behavioural economics. We thus further develop the circuits of power approach and the discussion about the role of obligatory passage points. Moreover, the approach had not yet been applied to the study of new organizational forms like platform businesses, and new work arrangements like gig work. In case of Uber, five important groups of mechanisms can be distinguished as described below.

First, the fundamental shape of value-creating processes at Uber can be described as a regime of '*algorithmic bureaucracy*', in which

Comparable to traditional bureaucracies, activities (...) resemble predefined 'performance programs' (March and Simon, 1958) or 'conditional programs' (see Luhmann, 2000) performing (.) simple bureaucratic if-A-then-do-B rules. Thus, very similar to regular formal organizations (Mintzberg, 1979), [platform] marketplaces standardize processes by bureaucratic routines to effectively cope with the vast uncertainty and the manifold alternatives of possible user activities. (Kirchner & Schüßler, 2018:10).

While processes and performance programs are set this way by the design of the software, the rules of membership are set by platform providers in ‘click-through’ agreements. These are binding formal guidelines that define the fundamental shape of ‘account membership’ (ibid.) resembling mechanisms of bureaucratic control known from labour process theory (e.g. Child 1984) which – in contrast to ‘conventional’, non-digitalised, organizations - are embedded almost entirely in software infrastructure in case of platform businesses.

Second, Uber and other platforms implement *user evaluation systems* that allow customers (riders in this case) to rate gig workers’ (drivers’) performance. Yet drivers have almost no direct contact with members of Uber’s management as the app-based approach to work and process organization keeps management almost invisible to drivers the existence of such evaluation systems introduces an element of ‘direct control’ and ‘output control’ (Burawoy, 1979; Child, 1984; Edwards, 1981) to the gig-work process. By Uber ‘outsourcing’ managerial tasks in this manner, it empowers customers ‘to act as middle managers over drivers, whose ratings directly impact their employment eligibility (Fuller & Smith, 1991; Stark & Levy, 2015)’ (Rosenblat & Stark, 2016:3772). The mechanisms used are quite similar to those described in debates on ‘control by customers’ in the works of labour process scholars (Taylor, Mulvey, Hyman, & Bain, 2002).

Third, platforms such as Uber apply various forms of ‘*market manipulation*’ (Kirchner & Schüßler, 2018) such as *dynamic pricing systems*. These systems are referred to as ‘surge-pricing’ as they ensure service coverage in case of temporal and spatial mismatches between demand and supply (Nachtwey & Staab, 2015). In line with Taylorist logic regarding monetary incentives (e.g. Littler, 1978), drivers are informed by push-up notifications when the demand is high or is expected to be high soon, and payment rates during times of high demand are temporarily increased (e.g. Rosenblat & Stark, 2016; Shapiro, 2017). This kind of notifications are sent to drivers regardless of whether they are logged-in or offline.

Fourth, Uber’s software setup designs *internal communication and leverages selective information* in a purposeful manner to influence the drivers’ behaviour. These mechanisms are discussed as ‘info-normative control’ in labour process perspectives on platform work (Gandini, 2018). Communication with drivers is almost entirely app-based and is unidirectionally top-down. Uber intensively uses pop-ups, push notifications, and email alerts, which provide drivers with selective information focused on motivating them to act according to the platform’s requirements. For example, they are urged to keep on driving when the demand is high (e.g. Rosenblat, 2018). In contrast, drivers’ access to information

and their ability to communicate with the platform providers is limited (ibid.). Uber purposefully uses information asymmetry to expose, hide and circulate certain information to induce the desired behaviour among drivers (i.e. Scheiber, 2017). For instance, Uber's app hides information about a passenger's destination before the driver accepts a certain ride, to ensure that unfavourable ride requests – such as rides that lead drivers into remote areas with sparse demands for further rides – are covered (ibid.). The top-down communication also includes rhetoric manoeuvres that seem to supplement and enhance surge-based incentives. An example reported by Rosenblat and Stark (2016) are push-notifications reading 'Are you sure you want to go offline? Demand is very high in your area. Make more money, don't stop now!' (ibid.:3768). Reports quote a veteran Uber driver who stated: 'It was all day long, every day – texts, emails, pop-ups: "Hey, the morning rush has started. Get to this area, that's where demand is biggest"' (Scheiber, 2017:5). There indicates the extensive use of such invocations that can be conceptualized as 'inspirational appeals' (i.e. Yukl & Tracey, 1992) from a micro-political perspective.

Fifth, research highlights forms of control used by Uber and similar platform businesses, which can be conceptualized as '*nudges*' from a behavioural economics perspective (e.g. Kahneman & Egan, 2011, Thaler & Sunstein, 2008). By embedding automatized nudges in software infrastructure, Uber creates 'persuasive technologies' (Berdichevsky & Neuenschwander, 1999). These technological devices 'persuasive in themselves' (ibid.) have proven to effectively influence users by triggering cognitive biases and social influence in a non-coercive way (e.g. Fogg, 2002; Nye, 2014). In addition to the mechanisms described above, such as dynamic pricing and selective information, studies have identified a range of such 'persuasive' mechanisms that are subtle and 'hidden from view' in case of Uber (Calo/Rosenblat, 2017). For instance, drivers can set target incomes in the app. After target-setting, the app visualizes the driver's progress and continuously encourages him or her to reach the goal. In a similar vein, research points to various elements of *gamification* such as gratification badges and other 'non-cash-rewards' (Scheiber 2017). These practices are geared towards influencing behaviour by triggering user motivation through elements known from game design (Leismeister & Blohm, 2013). Examples include high ride-acceptance rates, good customer ratings, and availability at short notice.

To sum up, the various groups of mechanisms together form a ‘diversified portfolio’ of control and influence measures that are embedded in Uber’s obligatory passage points. We subsequently analyse the effect of these mechanisms on both business efficiency and labour conditions at Uber.

Labour- and Efficiency-Related Outcomes

The circuits of power approach emphasises both the facilitative and the restrictive or disciplinary effects of power in and around organizational settings. In this section, we show how the five groups of mechanisms discussed above both facilitate economic efficiency and affect drivers’ labour conditions.

First, *algorithmic bureaucracy* can be seen as the cornerstone of Uber’s approach to process coordination. This aspect structures the power relations between drivers, riders and platform providers by ‘facilitat[ing] the semi-automated management of large, disaggregated workforces’ (Rosenblat 2017:256) and provides the basis for the platform’s ‘disciplinary regimes’ (Kirven, 2018). It enables platform providers to sanction users through exclusion from the platform in case of misbehaviour; it also enforces discipline in accordance with predefined rules and process patterns. This approach is coupled with Uber’s business-model efficiency and provides the platform with flexibility to react to market contingencies. Uber can unilaterally alter the conditions and formal *rules of membership* according to its goals, which are mainly economic, while leaving gig workers with little opportunity for ‘voice’ when conditions are changed in ways that do not favour them (e.g. Aloisi, 2015; De Stefano, 2015). An example is events for which Uber decided to lower its fares and the drivers’ only opportunity to continue working was to agree to these changes during their next login (e.g. Scheiber, 2017). While favourable for the platform provider, such practices decrease the income predictability for workers.

Second, the *user evaluation systems* used by platforms to obtain cost-efficient, semi-automated process controls also entail both facilitative and disciplinary effects. In case of Uber, riders can rate drivers based on a five-star metric after ride completion. For drivers, these ratings can have severe consequences: when their average rating drops below 4.7 for a certain period, drivers are excluded from the app.¹⁸ Drivers thus rely heavily on favourable user evaluations. Coupled with job insecurity, this dependence is associated with

¹⁸ For a detailed description of Uber’s user evaluation mechanism, see for example Rosenblat, Levy, Barocas & Hwang, 2017.

psychological pressure, identity issues and other negative aspects discussed in studies on emotional labour (Gandini, 2018). This also highlights the problem of power asymmetry between the platform management and drivers. The rating criteria are centrally set, with no input from drivers. Thus, the ratings by riders can be highly subjective and at times may involve irrational, emotional, and biased judgements. In line with this, research indicates that gender- and race-based discrimination can occur (Rosenblat, Levy, Barocas & Hwang, 2017). These issues are highly problematic because software-based evaluation systems one-sidedly discriminate against drivers, who have limited opportunities to defend themselves in cases of unjustified poor ratings (ibid.).

Third, measures of *market manipulation* by dynamic pricing also one-sidedly favour the business-model efficiency of Uber and similar platforms (e.g. Nachtwey & Staab, 2015; Kirchner & Schüßler, 2018). However, while this ‘control lever’ (Gurvich et al., 2016) superficially appears to provide opportunities for additional income for gig workers, research points to problematic side effects. For instance, Shapiro (2017) reports that surges during short-term spikes in demand, accompanied by push notifications sent to offline drivers – referred to as ‘bat signal’ in the company lingo – often lead to numerous driver log-ins. Mike, one of Shapiro’s interviewees, discussed the adverse consequences of this practice: ‘If you send out a bat signal, that’s fifty people that are going to sign on (.) within a few minutes, and then the work just gets scattered’ (ibid.:11). Dynamic pricing, an influence tactic used by Uber and other on-demand platforms to alter incentives for gig workers, can thus have adverse effects. It can create a temporary oversupply, leading to a reduced prospect of being assigned to rides (Rosenblat & Stark, 2016). Due to its lack of reliability, transparency, and predictability for drivers, this kind of market manipulation has been criticized by journalists, drivers and researchers (e.g. Scheiber, 2017; Shapiro, 2017).

Fourth, the use of information asymmetry by *selective internal communication*, such as the policy of blind ride acceptance to ensure the coverage of less desirable rides, similarly ensures efficient platform operations. However, this policy hampers drivers’ ability to make informed cost-benefit calculations when deciding whether to accept a ride request (e.g. Calo & Rosenblat, 2017; Shapiro, 2017). Thus, although working for Uber appears to provide a high degree of autonomy for drivers, enforced blind passenger acceptance combined with surge-pricing and centrally set rules illustrate ‘how little control Uber drivers have over critical aspects of their work and how much control Uber has over the labour of its users’ (Rosenblat & Stark, 2016:3672). Similarly, while the facilitative effect of *rhetorical*

manoeuvres for Uber is straightforward, these practices also have curtailing effects on the informed and rational entrepreneurial decision-making of drivers. Essentially this decreases their income security and predictability.

Finally, elements of *nudging and gamification* seem to be highly effective mechanisms in Uber's portfolio of control-and-influence mechanisms. In line with scholarship on ethical issues of gamification (Kim & Werbach, 2016), critics highlight that gamification that rewards 'useless' or imaginary gratification (Schmidt, 2016) can serve a manipulative purpose. Some researchers have even dubbed software-based gamification in a business context as 'exploitationware' because these practices 'replace real incentives with fictional ones' (Bogost, 2011, 2013). In addition to the ethical issues of such practices, they negatively affect people's income predictability and working conditions. A recent article in *New York Times* discussed these aspects:

'Uber [...] is engaged in an extraordinary behind-the-scenes experiment in behavioral science to manipulate [drivers] in the service of its corporate growth ... using psychological inducements and other techniques ... to influence when, where and how long drivers work. [Methods include] video game techniques, graphics and noncash rewards of little value that can prod drivers into working longer and harder – and sometimes at hours and locations that are less lucrative for them (Scheiber 2017:1-2).

To sum up, the effects of the mechanisms explained above, which are embedded in the organization's obligatory passage points affect the episodic level of organizational interaction. The influence derives from a mixture of bureaucratic, incentive-based, discursive and psychological elements. Top-down, these mechanisms thus appear as narrow efficiency-seeking political tactics of platform management to influence drivers' behaviour. Simultaneously, this 'diversified portfolio' of control and influence mechanisms comes along with negative outcomes for gig workers' labour conditions.

Micro-Political Implications and Outcomes on Structural Power

After having provided insight on the facilitative and restrictive effects of Uber's software-based control mechanisms, we focus here on the structural outcomes of these practices. In the course of continuous organizational interaction, 'actors seek to maintain, gain or deny strategic advantage by controlling or contesting the meaning and control of these obligatory passage points' (Oliveira & Clegg, 2015). In addition, 'control [of] obligatory passage points,

provides [agencies] ... with the capacity to influence meaning and day-to-day interactions, and control work and resources' (Hutchinson et al., 2010:35). With a focus on this 'dialectic of structure and action', the concept of obligatory passage points helps to explain why organizational settings such as Uber are characterized by rather persistent power configurations, whereas other platform settings have less inert power relations. Such more dynamic arrangements are likely to occur where low-power actors possess considerable room for agency. In contrast, more persistent arrangements can be expected in settings where powerful players, such as platform managers, possess far-reaching competences to channel episodic processes in ways that reproduce or increase their own power resources, while curtailing low-power actors' resources and capacity to engage in micro-political activities.

From this perspective, the initial setup of structural circuits of power in the case of Uber seems to support the emergence and persistence of asymmetric power relations. This is based on the mechanism discussed above by reifying the providers' dominance while diminishing the workers' power. These effects can be disentangled from a micro-political perspective by focusing on the outcomes of episodic processes, in terms of gig workers' power resources, interests and social relations.

First, as a result of Uber's algorithmic management approach, gig workers' *power resources* are limited in several ways. The company imposes strict process patterns by algorithmic bureaucracy and account membership, combined with a specific subcontracting approach that legally classifies gig workers as independent contractors. Besides beneficial consequences for platforms providers and a range of negative consequences for gig workers' labour conditions, these practices also impede gig workers' access to 'hard' power resources and 'robust tool-kits' (Williams & Geppert, 2011). Such missing resources include formal participation rights, guaranteed pay rates, and protective labour regulation which workers could use to safeguard their interests (i.e. De Stefano, 2015).

Moreover, this setup restricts gig workers' ability to engage in activities geared to the utilization of 'soft' power, as described in micro-political studies (e.g. Crozier & Friedberg, 1979). Digital Taylorism and the 'quasi-panoptic' (Kirchner & Schüßler, 2018) possibilities of the platform management to monitor gig workers together with direct control through customer evaluation systems curtails the ability of Uber drivers to productively use 'zones of uncertainty' (ibid.) to enhance their power base. Traditional organizational arrangements provide low-power actors with room to utilize certain zones of uncertainty for micro-political activities. This point was demonstrated in studies such as that of Strauss et al. in their work

on the ‘negotiated order’ in hospitals (Strauss et al., 1963), Crozier’s study on technicians in tobacco factories (1964), and Barley’s study on technicians in hospitals (1986). In contrast, the possibility of Uber drivers to engage in micro-political activities remains rather limited, not least because of the impersonalized management practices and the absence of top and middle managers to engage in negotiations.

Second, in line with behavioural economics and discursive approaches (see above), it is important to disentangle how some of the mechanisms outlined above affect *gig workers’ decision-making*. On an individual level, mechanisms related to nudging, rhetorical invocations and gamification steer episodic processes in a way that is likely to produce outcomes that reproduce (or enhance) existing power asymmetries. They also hinder the emergence of resistance that could challenge the existing work arrangements, because drivers’ informed decision-making is limited by these subtle influencing mechanisms (e.g. Scheiber, 2017). Related to this, Uber uses its access to information channels to legitimize its ‘self-employment model by framing engagement as autonomous, self-determined “entrepreneurship”’ (ibid.). This ‘strategic sense-giving’ (e.g. Rouleau 2005) seems to be aimed at impeding the emergence of counter-discourses. Through the lens of the circuits of power model, these manoeuvres can be seen as an attempt by platform providers to influence actors’ rational calculations and choices (Shapiro, 2017). They embed rhetorical and emotional influencing mechanisms in technology-based obligatory passage points that are geared toward inducing the desired behaviour from drivers. Thus, in light of insights from behavioural economics and the social sciences, the way Uber uses rhetorical invocations, gamification and nudges can be conceptualized as specific techniques of production and discipline in terms of the circuits of power approach.

Third, concerning *socio-technical relations*, mechanisms such as surge pricing notifications not only serve the company’s interests in growth and handling fluctuations in demand and supply, but also increase competition among drivers (e.g. Schor, 2018). Concerning lateral relations between gig workers, these policies can hinder solidarity as Uber’s management approach strongly controls the type and frequency of social interactions and human relations between drivers. Gig workers are thus seen as ‘atomized’ workers (e.g. Aloisi, 2015) with few or no direct encounters in their daily activities. This lack of frequent physical co-presence is typical for many jobs in private transportation. However, Uber drivers have hardly any contact with co-drivers compared with – for example – ordinary taxi drivers, who usually know each other and chat by taxi radio while driving or waiting for customers. This

lack of episodic encounters at the professional level is thought to impede the emergence of collective action, solidarity and interest formation among Uber drivers.

The socio-technical setup is also important in understanding why hierarchic interactions of drivers with management are unimportant in the Uber case. Such interactions are seen as opportunities for ‘politicking and issue-selling’ of low-power actors (Becker-Ritterspach et al., 2016; Palonen, 2003). We illustrated that the opportunities for gig workers to get in touch with platform providers are limited and are almost entirely software-based (e.g. Rosenblat, 2018). This is seen as cost-efficient management but also prevents face-to-face interaction, which might otherwise provide room for voicing criticisms and developing personal relations with management.

To sum up, the structure of obligatory passage points that is set up in the case of Uber seems to stabilize the platform’s asymmetric power relations. This affects the drivers’ power resources, decision-making processes and social relations. Gig workers have limited room for individual and collective political agency to resist working conditions or to develop effective forms of internal voice.

Summary and Contribution

Based on the framework of circuits of power, we developed a template to systematically examine the various elements and power-related effects of algorithmic management (see Figure 3 and Table 8 in the appendix for a condensed overview). Thereby we also highlight the facilitative and punitive effects of the existent power relations in the case of Uber. Through legal and information-based power resources, Uber management is able to implement a diversified portfolio of techniques of production and discipline, ranging from bureaucratic rules and economic incentives to various efforts at strategic communication and nudges in its ‘persuasive’ software infrastructure. The implementation of these mechanisms of surveillance, discipline, control and incentives provides the conditions for coordinating value-creating processes at the episodic day-to-day level. By analysing aspects of power in daily interactions, we demonstrated that this setup of social and systemic integration is useful for steering processes efficiently. In addition, it serves to channel outcomes from repeated episodes of power in a way that reifies existing structural power configurations and power asymmetries, by limiting workers’ resources for micro-political activity. Hence, our analysis illustrates how the circuits of power-based perspective of gig work enables analysing how power relations are stabilized in specific gig-work settings.

We also conceptualized how initial power asymmetries allow platform providers to set up mechanisms of control and influence that safeguard managerial objectives. These aims include cost-efficient and ‘just-in-time’ provision of services. At the same time, they provide grounds for unfavourable working conditions in problematic cases of gig work. Thus, we provide a theoretical conceptualization of descriptive findings from current gig-economy scholarship, arguing that ‘rhetorical invocations of digital technology and algorithms are used to structure asymmetric corporate relationships to labour, which favour the former’ (Rosenblat & Stark, 2016:3768).

In our analysis of circuits of power in gig-work organizations, we also develop this approach further by drawing on concepts from labour process theory and behavioural economics. In doing so we specify how the concept of obligatory passage points can be refined for the study of digital work organizations. Until now, the meta-theoretical model of circuits of power has not been applied to power relations in platform arrangements. We conceptualize novel software-based mechanisms based on Clegg’s original model to illustrate how the model can be applied to this emergent form of business organization. We believe that this theoretical

elaboration provides a fruitful starting point for future research on power relations and labour conditions in digital business models.

Moreover, our illustrative case study of Uber helps in understanding the role of subtle forms of influence exercised in certain gig-work settings, as a consequence of specific non-contractual forms of employment within platform businesses. Conventional contractual models of employment in ‘Coasian organizations’ (Davis, 2016a, b) largely rely on formalized management and labour relations, formal rules, authority, and hierarchies. These features are based on contractual relations and fixed periodic income to handle the ‘transformation problem’ (Braverman, 1974). By contrast, platforms have limited scope to use these conventional mechanisms. Although their freelance subcontractor approach is beneficial for cost-saving and provides high flexibility for platform organizers, a major disadvantage from the managerial perspective is the absence of formally legitimized authority. The intense use of nudges, gamification and rhetorical invocations seemingly aims at handling this control deficit; the technological setup of platform businesses uses these new forms of control and influence as ‘compensatory’ mechanisms. Thus, our findings contribute to recent debates discussing the potentials and boundaries of platform work (e.g. Kircher & Schüßler, 2018) by highlighting the role of these ‘compensatory’ mechanisms for the efficiency of platform-based organization.

Avenues for Future Research

We applied the circuits of power approach to a systematic analysis of power relations at platform business organizations and gig-work arrangements. We believe that the heuristic template we introduced for this purpose can inform further development of organizational power theories. It is especially relevant to new organizational forms and work arrangements in the gig economy in the following ways.

First, the heuristic analytical template we propose might help to *systematize existing scholarship* and integrate the findings from different camps of research regarding organizational power. As outlined, power is addressed implicitly or explicitly in various contributions to the field of gig-economy scholarship. Some researchers draw on heterogeneous theoretical foundations, sometimes in a rather descriptive manner. Our template might be useful to guide and structure comprehensive reviews on power in gig-work arrangements, by integrating the findings from these diverse studies in a systematic way based on a meta-theoretical framework. Similarly, our template could serve as framework to organize systematic case comparisons of power relations in different types of platform businesses and gig-work settings.

Second (and related to the first point), future studies applying a circuits of power approach might *contribute to ongoing debates on the broad heterogeneity of different forms of gig work* (e.g. Davis, 2016a, b). Our paper concentrates on the problematic case of Uber, with a focus on the intertwined mechanisms of episodic and structural power and how they relate to the emergence of problematic labour conditions at the ‘dark side’ of the gig economy. We identified mechanisms of control and influence that have also been found in other platform arrangements (e.g. Ivanova et al., 2018). However, other contributions point to less problematic labour conditions in ‘high road companies’ that provide ‘relatively stable, good-paying jobs.’ (Kalleberg & Dunn, 2016: 74).

For instance, various conditions in the gig economy have been associated with *agency, task and process related aspects*. These include the qualification levels that are required and the job and task profiles, as well as the labour market position of workers (Kalleberg & Dunn, 2016). Case-specific power configurations in these varying settings differ from those described in our case, because workers have higher status and power and more micro-political scope for agency.

Similarly, Wood et al. (2019a) analysed the ways in which digital gig work can be – and is – monitored and controlled by management. Compared to our research, that study focused on workers who possessed more opportunities to bypass strict controls and surveillances due to characteristics inherent in the tasks and processes, which limited platform organizers’ ability to narrowly streamline episodic processes. For instance, key-logging and screenshot algorithms applied to monitor digital gig work in such settings can be outsmarted more easily than would be possible at Uber. The nature of tasks in these contrasting cases limits the ability of platform providers to engage in quasi-panoptic surveillance, thus providing larger zones of uncertainty to workers. This enables them to partially circumvent software-based control and surveillance, thereby giving them more autonomy in their work processes. Similarly, qualified jobs such as programming provide more room for ‘service differentiation’ compared with Uber work. Such setups provide workers with more opportunities to build up their individual power resources, for example by gaining reputation and symbolic capital based on positive user evaluations (Wood et al., 2019a, b).

A comparison of the ways in which obligatory passage points are set up digitally in these different platforms should also consider the *importance of different organizational and societal institutions*. Although problematic labour conditions seem to be widespread among gig-work platforms, with a strict for-profit orientation based on shareholder-value logics, ‘The eventual fate of this form of “micro-entrepreneurship” is uncertain’ (Davis, 2015:138). This is because the ‘Platforms are highly malleable, and there is clearly room for non-corporate alternatives (ibid.). This also points to the role of heterogeneity in actor configurations and structural circuits of power that result from case-specific *governance models* as well as from different environmental influences related to heterogeneous *national business systems* (Whitley, 1999) and *institutional ecosystems* (Meijerink & Keegan, forthcoming) in which platform businesses operate. Alternative governance and ownership models might lead to socio-technical relations between key actors that fundamentally differ from those we studied. For instance, organizational settings of cooperatives or non-profit platforms would set up different initial power relations and interest configurations; this would presumably lead to the establishment of significantly different facilitative mechanisms in structural circuits of power. Similarly, varying institutional environments can enable or restrict the ways in which certain *techniques of production and discipline* can be enforced or contested in platform arrangements. For instance, Uber’s unilateral alteration of fare rates has led to lawsuits to improve the legislation that declares such practice illegal (Rosenblat, 2018).

In line with this, better *industrial relation regulations* for gig workers to improve their legal status as well as minimum wages and rights and obligations for collective bargaining, seem to be important to improve labour conditions. They have the potential to support micro-political agencies and the building of ‘robust tool-kits’ (Williams & Geppert, 2011) for employee voice (e.g. De Stefano, 2015).

Third, beyond the potential to inform systematic comparative studies, our approach based on circuits of power could provide a toolkit for *studying the processes political formation and transformation of power and employment relations in certain gig-work arrangements, from a dynamic perspective*. Our illustrative analysis draws on a case that is characterized by rather asymmetric power relations, which have proven to be relatively stable. However, the circuits-of-power lens also provides potential for the study of organizational change.

For instance, it could be used to shed more light on cases where successful episodes of resistance leading to improved labour conditions in gig-work arrangements occur. For example, 3F – a Danish trade union – recently signed the first far-reaching collective agreement in gig work worldwide with Hilfr.dk, a platform for private home-cleaning providing minimum hourly wages, contributions to pension savings, and holiday and sick pay to workers (hilfr.dk, lo.dk). A longitudinal, in-depth investigation based on circuits of power could analyse how such critical events alter the internal power configuration in such cases over time, for instance by capturing how the shift in socio-technical-relations and power resources presumably induced by such agreements might alter power relations between management and workers as well as the institutionalization of algorithmic management in the respective organizational settings on the long run. The study of such cases where existent platform arrangements undergo significant transformations could also help to specify the way exogenous environmental contingencies (e.g. changes in labour regulation) interact with structural circuits of power and translate to changing episodic power relations leading to shifts in platform power configurations. This might ultimately provide more detailed insight into the processes and pathways for organizational change in gig-work arrangements.

Overall, we think that future comparative and/or longitudinal studies based on circuits of power might help to provide a more systematic and clear-cut picture on the link of power configurations and labour conditions in heterogeneous gig work settings. In our view, some of the core questions to ask here are:

1. how and why certain control mechanisms and obligatory passage points are set up in a specific way in different platform settings due to differing micro- meso- and macro-level conditions,
2. how these varying practices of algorithmic management influence power relations between management and gig workers in different platform arrangements, and
3. how and when different regulative, socio-economic and normative institutional influences might facilitate power structures more supportive to gig workers' voice and micro-political activities.

This kind of research could ultimately contribute to the question of how problematic conditions in some contemporary digital business models might be overcome by providing elaborated blueprints of successful worker emancipation, which could be triggered both 'bottom-up' by workforce resistance and 'top-down' by better regulation. This seems particularly important as 'Uberization render[ing] the corporate employment relation increasingly dispensable' (Davis, 2016:512) has gained momentum, oftentimes making '(t)hings worse, at least from the perspective of labor' (ibid.:511) and therefore posing urgent questions not only to academics but also policy-makers and practitioners of labour representation.

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Appendix

Chaper 3: Stages of Overview Literature Sampling

Stage 1: Start Sample (N=65)

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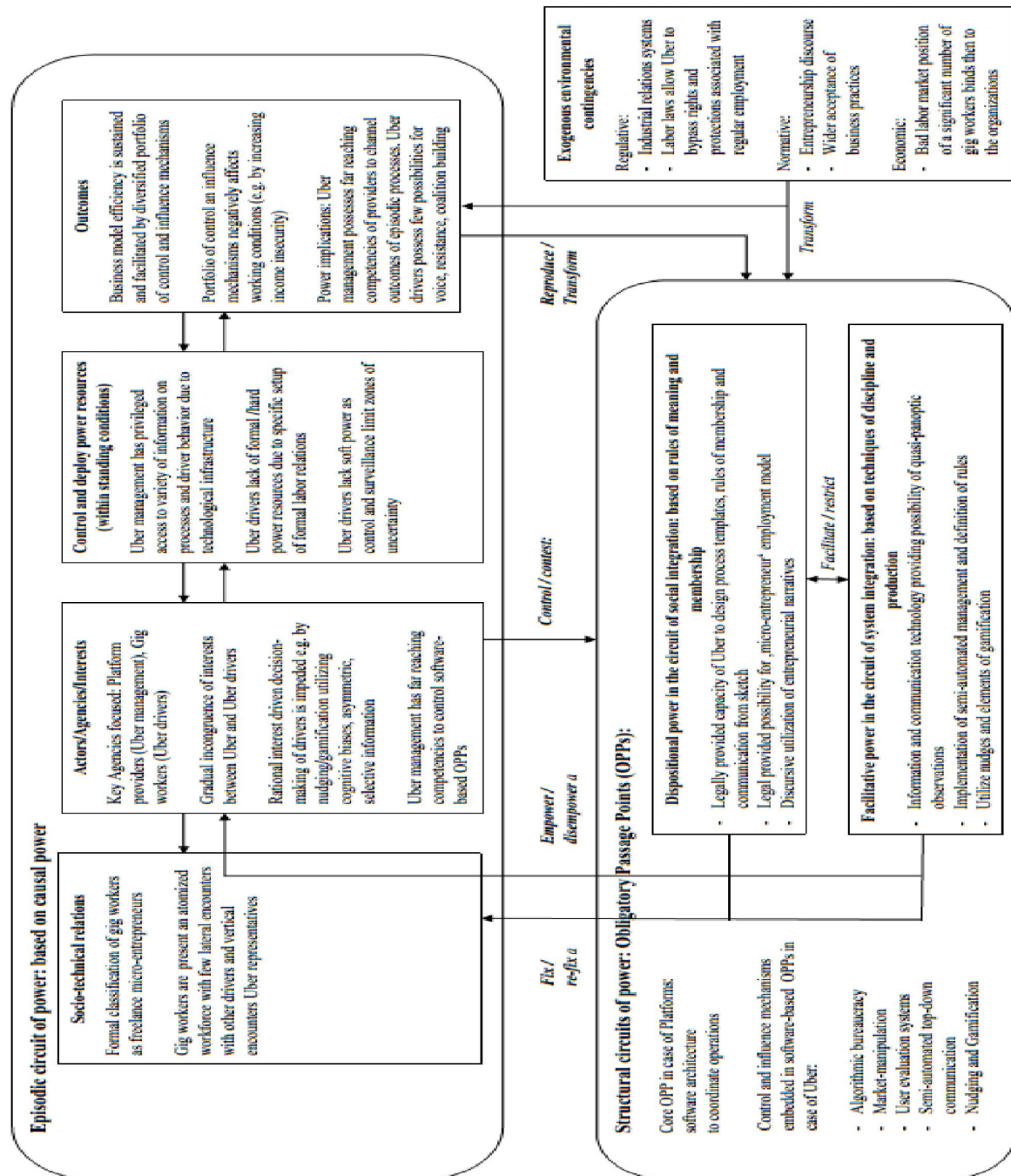
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Chaper 4: Additional Figures and Tables

Figure 3. Findings Derived from Application of Circuits of Power to the Case of Uber.



Source: Own compilation.

Table 8. Overview of Findings in Illustrative Uber Case Study, Structured Using Our Circuits-Of-Power-Based Heuristic Template for Studying Power Relations in Platform Arrangements.

Analytic Dimension Step of analysis	Guiding questions for the study of gig-work arrangements	Findings from the illustrative analysis
Relevant sub-concept(s) derived from Circuits of Power		The case of Uber
Standing or initial conditions for setup of local platform	Which are the key agencies focused? What are the interests of agencies? How do the interests of key agencies differ? Which technologies of production and discipline are available to key agencies to be embedded in obligatory passage points? Which actors possess the capacity to influence the setup of obligatory passage points?	Gradual interest incongruence between Uber management and gig workers can be identified. Formal conditions include a for-profit ownership structure and the regulatory environment includes the possibility to implement a specific workforce management approach. These aspects provide far-reaching competencies to Uber management so that it can design its software-based control infrastructure 'from scratch'. This ability allows platform providers to establish and refine a diversified portfolio of algorithmic surveillance, control and discipline, using purposeful integration of various mechanisms in organizational obligatory passage points.
Key actors and agencies, Interests, Technologies of production and discipline		
Control and influence mechanisms are institutionalized in platform's software infrastructure	Which control and influence mechanisms are utilized by key agencies, such as platform providers? These mechanisms steer the episodic processes of production and service provision or organized value-creation.	Five groups of mechanisms embedded in the platform's software infrastructure create a diversified portfolio that is used by Uber to steer processes: <ul style="list-style-type: none"> - Formal mechanisms include algorithmic bureaucracy and digital Taylorism (e.g. prescribed process templates and formal rules implemented by click-wrap account membership) - Some mechanisms induce elements of direct control by customers (e.g. user evaluation systems) - Incentive-based mechanisms are related to providers' efforts to match demand and supply (e.g. dynamic/surge pricing) - Informal mechanisms are related to platform provider's internal communication, rhetorical manoeuvres and the use of information asymmetry (e.g. push notifications, blind-ride acceptance and inspirational appeals) - Informal mechanisms are related to subtle influencing tactics, based on insight from behavioural economics (e.g. nudging, persuasive app design, gamification by badges and achievements)
Software-based obligatory passage points		
Top-down perspective: Effects on process management and business model efficiency	How do the specific mechanisms of software- based control and work organization in focal case contribute to the business model efficiency of focal platform?	The mechanisms described contribute to cost-efficient, semi-automated and lean organization of value-creating activities in several ways: <ul style="list-style-type: none"> - Algorithmic bureaucracy provides platform organizers with a high degree of flexibility to react to market contingencies and refine labour utilization. The semi-automated fixation of processes and rules can replace more costly forms of control. - User evaluation systems allow for cost-reduction/cost-efficient output control by 'outsourcing' direct supervision to customers. - Surge pricing and patterns of internal top-down communication serves to handle temporal mismatches in demand and supply. - Rhetoric manoeuvres and inspirational appeals serves to reduce personnel cost by substituting wage payments with non-cash rewards
Impact of software-based obligatory passage points on episodic circuit of power. The focus is on the facilitative facet or effects of power		
Top-down perspective: Labour-related outcomes, effects on working conditions	How do the specific mechanisms of software- based control and work organization in focal case affect work quality and labour conditions?	The mechanisms described affect work quality and labour conditions in several ways: <ul style="list-style-type: none"> - Platform provider's access to process- and user-generated data means that gig workers are subjected to quasi-panoptic surveillance. - Due to algorithmic bureaucracy (e.g. software-based process templates and click-wrap membership agreements), gig workers have little option to negotiate when formal employment conditions are altered in ways that do not favour them. - Algorithmic management creates patterns of coordination that offer few possibilities for direct encounters or opportunities for interest articulation and micro-political activities. - Dynamic pricing can adversely affect drivers' income, due to temporal oversupply and less income predictability. - Software-based rhetorical influence and selective information increase the odds of drivers having to make a decision without enough information, which can lead to accepting unfavourable orders. - Income targeting can lead drivers to work long hours, even in situations where income opportunities are low. - Gamification can influence drivers at a subconscious level, for example to accept low payment rates.
Impact of software-based obligatory passage points on episodic circuit of power. The focus is on the restrictive, disciplinary and punitive facet or effects of power		
Bottom-up perspective:		
Micro-political implications and outcomes for structural power relations	How do the specific mechanisms of software- based work organization in focal case affect structural power relations between key agencies (e.g. platform providers and gig workers) in continuous interaction (e.g. by reifying or altering existing power asymmetries)?	At Uber, the socio-technical relations and the agency's decision-making processes affect the power resources. The specific setup of mechanisms ensures and maintains exclusive control by the platform provider over obligatory passage points, thus reifying the platform's dominance. Platform providers possess far-reaching competencies to channel episodic processes in a way that reproduces or increases their own power. The specific style of software-based work organization limits gig workers' resources to engage in micro-political activity. The workers encounter zones of uncertainty and platform efforts that impede the emergence of counter discourses, which limits lateral and hierarchic interaction. As a result, existing power asymmetries in Uber tend to become sustained. The possibility for endogenous change (i.e. change in organizational power configurations) induced by gig workers' micro-political activities and geared towards direct voice, resistance, and negotiations, remains limited.

Source: Own Compilation

Deutsche Zusammenfassung

Lebenslauf

Akademische Ausbildung

Wissenschaftlich relevante berufliche Tätigkeit

Liste der wissenschaftlichen Vorträge und Publikationen

- 2013 *Vortrag* „New Firms and New Forms of Work“ im Rahmen des *Interdisciplinary European Congress on Entrepreneurship Research* (IECER) in Brescia, Italien.
- 2013 *Discussion Paper* Koch, A./Pastuh, D./Späth, J, (2013): „New Firms and New Forms of Work“, *IAW-Discussion Paper No. 97*.
- 2015 *Vortrag* "Elements of total, greedy & reinventive institutions in work and employment practices of contemporary service sector business organizations" at the *31st EGOS Colloquium*, Athens, Greece.
- 2015 *Vortrag* "Revisiting Erving Goffman: Elements of Total Institutions in work and employment practices of Hard-Discount-Food-Retailers." WORK 2015 conference in Turku, Finland.
- 2015 *Book Review*: "Global Themes and Local Variations in Organization and Management-Perspectives on Glocalization by Gili S. Drori/Markus A. Höllerer/Peter Walgenbach (Eds.), Routledge, New York/London 2014." In: *Journal of International Management* 21, 78-81.
- 2017 *Journal article*: Geppert, M./Pastuh, D. (2017): Total institutions revisited: What can Goffman's approach tell us about 'oppressive' control and 'problematic' conditions of work and employment in contemporary business organizations? *Competition & Change*, 21/4: 253-273.
- 2018 *Wissenschaftliche Expertise*: Dörrenbächer, C./Geppert, M. Pastuh, D./Tomenendal, M.: *Cross-border standardisation and reorganisation in European multinational companies*. european report No. 141.
- 2018 *Vortrag*: 2018 "Power, Profits and Precarity: Studying Labor Relations and Organizational Control in Gig Work Arrangements from a Circuits of Power Perspective" (written together with Mike Geppert), im Rahmen der *Autorenkonferenz zum Industrielle Beziehungen Schwerpunkttheft: Digitale Arbeitswelten und –beziehungen*, Hamburg, Germany.
- 2019 *Journal article*: Pastuh, D./Geppert, M. (forthcoming): A 'Circuits of Power'-based Perspective on Algorithmic Management and Labour in the Gig Economy. Conditionally accepted manuscript forthcoming in: *Industrielle Beziehungen. Zeitschrift für Arbeit, Organisation und Management*, 27/2.

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